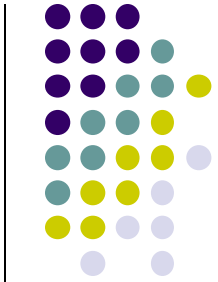
Q

Concerning PUK



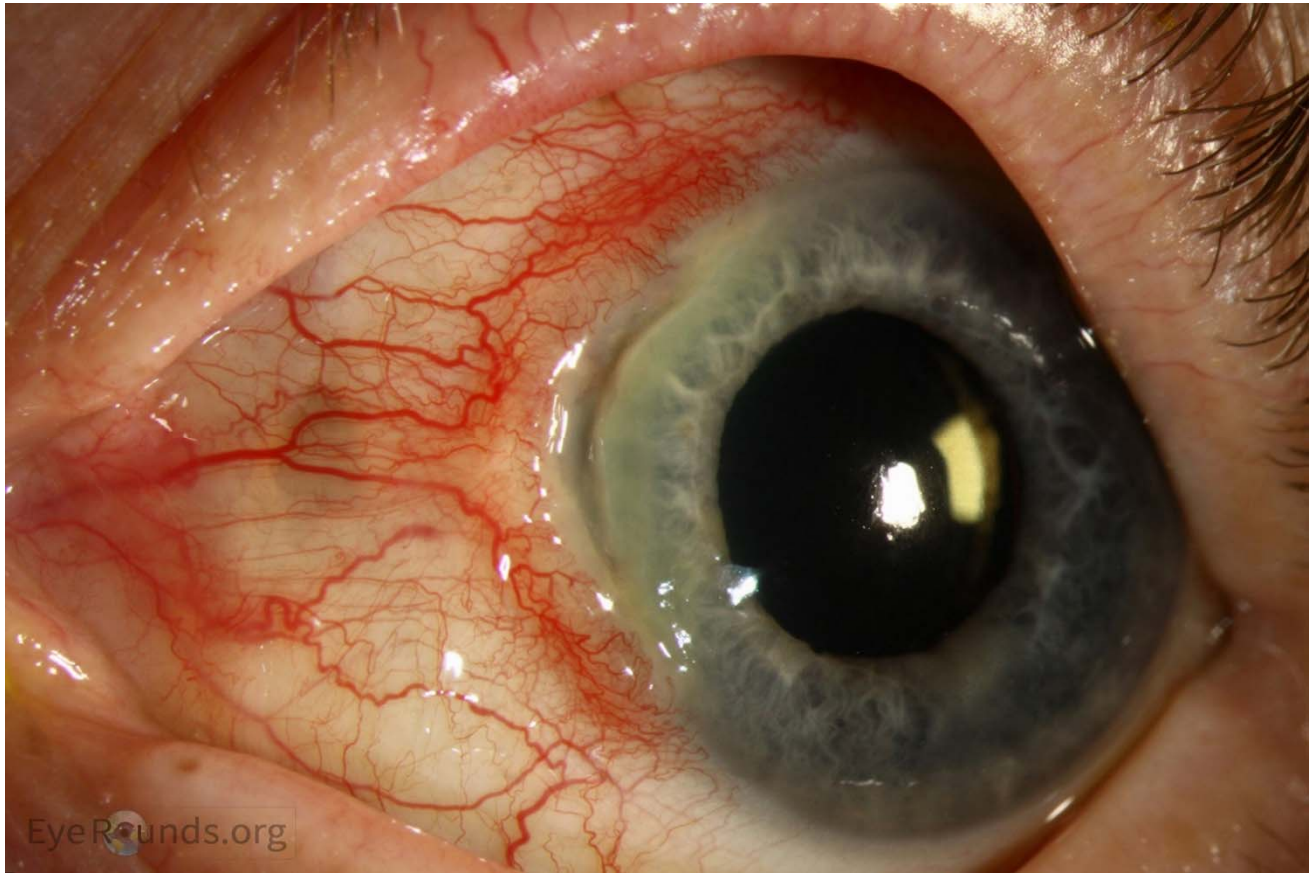
- Autoimmune PUK is usually laterality and circumferential extent

A

Concerning PUK

- Autoimmune PUK is usually unilateral and sectoral

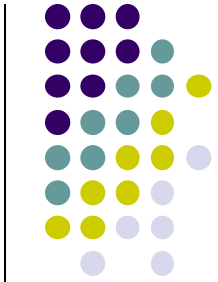
Concerning PUK



Autoimmune PUK

Q

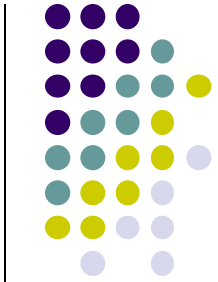
Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds improvement vs worsening of systemic disease

A

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?

- Autoimmune
- It often heralds exacerbation of **systemic disease**

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?

- Autoimmune Connective-tissue dz, especially vasculitides
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **Wegener's granulomatosis**, and **polyarteritis nodosa**

Of these three, which is most likely to be associated with PUK?

A

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

Of these three, which is most likely to be associated with PUK?
RA, by a substantial margin

Q

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

Of these three, which is most likely to be associated with PUK?
RA, by a substantial margin

What percentage of PUK pts have RA as their underlying condition?

A

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

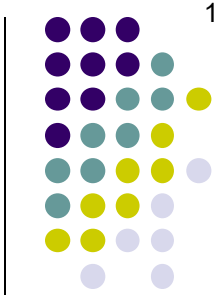
Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

Of these three, which is most likely to be associated with PUK?
RA, by a substantial margin

What percentage of PUK pts have RA as their underlying condition?
Up to 40

Q

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

Of these three, which is most likely to be associated with PUK?
RA, by a substantial margin

What percentage of PUK pts have RA as their underlying condition?
Up to 40

In addition to the peripheral cornea, what other ocular structure is commonly affected in these pts?

A

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

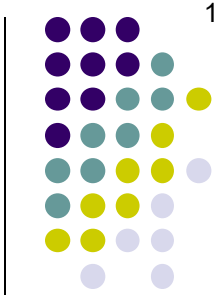
Of these three, which is most likely to be associated with PUK?
RA, by a substantial margin

What percentage of PUK pts have RA as their underlying condition?
Up to 40

In addition to the peripheral cornea, what other ocular structure is commonly affected in these pts?
The sclera

Q

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

Is PUK the most common ocular manifestation of RA?

ssociated with PUK?

heir underlying condition?

In addition to the peripheral cornea, what other ocular structure is commonly affected in these pts?
The sclera

A

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

Is PUK the most common ocular manifestation of RA?
No

ssociated with PUK?

heir underlying condition?

In addition to the peripheral cornea, what other ocular structure is commonly affected in these pts?
The sclera

Q

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

Is PUK the most common ocular manifestation of RA?
No

What is, then?

ssociated with PUK?

heir underlying condition?

In addition to the peripheral cornea, what other ocular structure is commonly affected in these pts?
The sclera

A

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, Wegener's granulomatosis, and polyarteritis nodosa

ssociated with PUK?

Is PUK the most common ocular manifestation of RA?
No

What is, then?
Keratoconjunctivitis sicca

heir underlying condition?

In addition to the peripheral cornea, what other ocular structure is commonly affected in these pts?
The sclera

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, ~~Wegener's granulomatosis~~, and polyarteritis nodosa

The term 'Wegener's granulomatosis' has fallen out of favor.

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, ~~Wegener's granulomatosis~~, and polyarteritis nodosa

?

The term 'Wegener's granulomatosis' has fallen out of favor.
What term is preferred in its place?

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, ~~Wegener's granulomatosis~~, and polyarteritis nodosa
granulomatosis with polyangiitis

The term 'Wegener's granulomatosis' has fallen out of favor. What term is preferred in its place?
'Granulomatosis with polyangiitis'

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

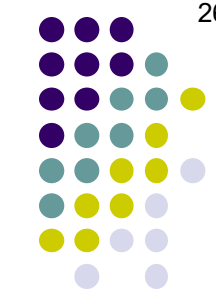
Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, ~~Wegener's granulomatosis~~, and polyarteritis nodosa
granulomatosis with polyangiitis

*The term 'Wegener's granulomatosis' has **fallen out of favor.***
What term is preferred in its place?
'Granulomato

Why did the name 'Wegener's granulomatosis' fall out of favor?

A

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, ~~Wegener's granulomatosis~~, and polyarteritis nodosa
granulomatosis with polyangiitis

*The term 'Wegener's granulomatosis' has **fallen out of favor.***
What term is preferred in its place?
'Granulomato

Why did the name 'Wegener's granulomatosis' fall out of favor?
Because Dr. Wegener was a Nazi

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

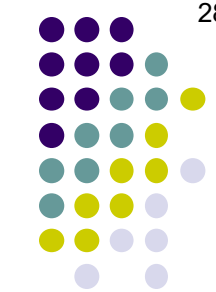
With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

granulomatosis with polyangiitis (GwP)

If you're having trouble remembering that granulomatosis with polyangiitis (GwP) is the entity formerly known as Wegener's…

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

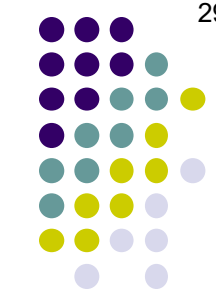
Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

*granulomatosis with polyangiitis (G**w**P)*

If you're having trouble remembering that granulomatosis with polyangiitis (GwP) is the entity formerly known as Wegener's…
Think of the little 'w' as standing for 'Wegener's'

Q

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

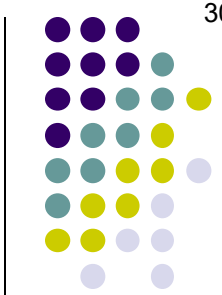
Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What is the classic triad of granulomatosis with polyangiitis (GwP)?

--
--
--

Q/A

Concerning PUK



With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

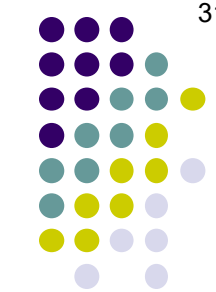
With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What is the classic triad of granulomatosis with polyangiitis (GwP)?
Necrotizing vasculitis of:
--
--
--

A

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What is the classic triad of granulomatosis with polyangiitis (GwP)?
Necrotizing vasculitis of:
--the upper and lower respiratory tract
--the kidneys
--small and medium-sized arteries and veins

Q

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What is the classic triad of granulomatosis with polyangiitis (GwP)?
Necrotizing vasculitis of:
--the upper and lower respiratory tract?
--the kidneys?
--small and medium-sized arteries and veins?

*What is the classic manifestation of the classic triad? That is, with what specific condition do these pts always present?**

**On the OKAP and Boards, that is*

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What is the classic triad of granulomatosis with polyangiitis (GwP)?
Necrotizing vasculitis of:
--the **upper** and lower **respiratory tract**
--the kidneys
--small and medium-sized arteries and veins

*What is the classic manifestation of the classic triad? That is, with what specific condition do these pts always present?**
Sinusitis. Don't diagnose a pt with GwP without it!*

**On the OKAP and Boards, that is*

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

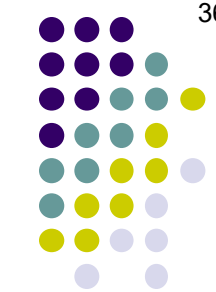
With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?
About half

Q

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?
About half

What is the most common manifestation of that involvement? (It's not PUK.)

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?
About half

What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

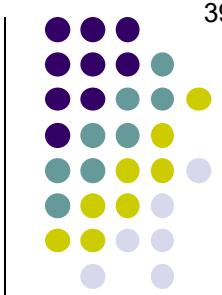
What proportion of GwP pts have ophthalmic involvement?
About half

What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

What is the next most common manifestation?

A

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

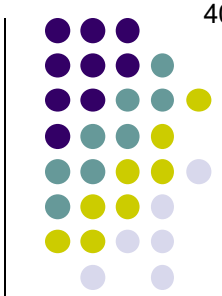
What proportion of GwP pts have ophthalmic involvement?
About half

What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

What is the next most common manifestation?
Scleritis (including PUK)

Q

Concerning PUK



With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?
About half

What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

What is the next most common manifestation?
Scleritis (including PUK)

Is retinal involvement in GwP a thing?

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?
About half

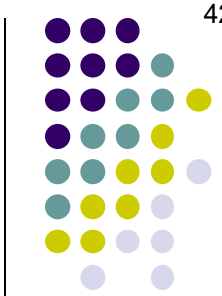
What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

What is the next most common manifestation?
Scleritis (including PUK)

Is retinal involvement in GwP a thing?
Yes, albeit uncommonly

Q

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?
About half

What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

What is the next most common manifestation?
Scleritis (including PUK)

Is ***retinal involvement*** *in*
Yes, albeit uncommonly

What form does retinal involvement in GwP typically take?

A

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?
About half

What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

What is the next most common manifestation?
Scleritis (including PUK)

Is ***retinal involvement*** *in*
Yes, albeit uncommonly

What form does retinal involvement in GwP typically take?
A retinal vasculitis (not surprisingly)

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

*With which connective-tissue diseases (CTDs) and/or **vasculitides** has PUK been associated?*
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

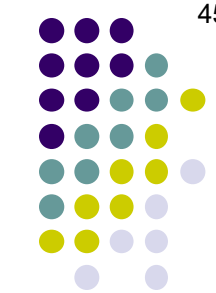
What proportion of GwP pts have ophthalmic involvement?
About half

What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

What is the next most common manifestation?
Scleritis (including PUK)

*Is **retinal involvement** in*
Yes, albeit uncommonly

What form does retinal involvement in GwP typically take?
A retinal vasculitis (**not surprisingly**)



Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

*With which connective-tissue diseases (CTDs) and/or **vasculitides** has PUK been associated?*
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, **granulomatosis with polyangiitis**, and polyarteritis nodosa

What proportion of GwP pts have ophthalmic involvement?
About

For more on GwP, see slide-set U1

What is the most common manifestation of that involvement? (It's not PUK.)
Orbital inflammation

What is the next most common manifestation?
Scleritis (including PUK)

*Is **retinal involvement** in*
Yes, albeit uncommonly

What form does retinal involvement in GwP typically take?
A retinal vasculitis (**not surprisingly**)

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

In a nutshell, what is the pathophysiology of PAN?

sculitides has PUK been associated?

UK?

polyarteritis nodosa

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

sculitides has PUK been associated?

UK?

nd **polyarteritis nodosa**

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?

sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

A

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical PAN pt?

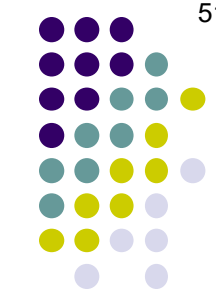
sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

Q/A

Concerning PUK



- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical PAN pt?
A M v F between 40 and 60 years old

sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical PAN pt?
A male between 40 and 60 years old

sculitides has PUK been associated?

UK?

nd **polyarteritis nodosa**

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical PAN pt?
A male between 40 and 60 years old

Is there a racial predilection?

sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

A

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical PAN pt?
A male between 40 and 60 years old

Is there a racial predilection?
No

sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

Q

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical PAN pt?
A male between 40 and 60 years old

Is there a racial predilection?
No

PAN is strongly associated with seropositivity for what virus?

sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

Q/A

Concerning PUK

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical PAN pt?
A male between 40 and 60 years old

Is there a racial predilection?
No

PAN is strongly associated with seropositivity for what virus?
Hepatitis

sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

A

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical PAN pt?
A male between 40 and 60 years old

Is there a racial predilection?
No

PAN is strongly associated with seropositivity for what virus?
Hepatitis B

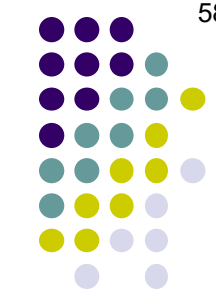
sculitides has PUK been associated?

JK?

nd **polyarteritis nodosa**

Q

Concerning PUK



- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical
A male between

Is there a racial pre
No

PAN is strongly associated with seropositivity for what virus?
Hepatitis B

sculitides has PUK been associated?

JK?
nd **polyarteritis nodosa**

What is the typical presentation of PAN? (Note: It's not ophthalmic.)

A

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical
A male between

Is there a racial pre
No

PAN is strongly associated with seropositivity for what virus?
Hepatitis B

sculitides has PUK been associated?

JK?
nd **polyarteritis nodosa**

What is the typical presentation of PAN? (Note: It's not ophthalmic.)
Constitutional symptoms: Fever, fatigue, weight loss. Renal vasculitis resulting in secondary HTN is common.

Q

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical
A male between

Is there a racial pre
No

PAN is strongly associated with seropositivity for what virus?
Hepatitis B

sculitides has PUK been associated?

JK?
nd **polyarteritis nodosa**

What is the typical presentation of PAN? (Note: It's not ophthalmic.)
Constitutional symptoms: Fever, fatigue, weight loss. Renal vasculitis resulting in secondary HTN is common.

What proportion of PAN pts develop ophthalmic involvement?

A

Concerning PUK

- Autoimmune
- It often heralds exacerbation of **systemic disease**

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

In a nutshell, what is the pathophysiology of PAN?
Subacute episodes of focal necrotizing inflammation of arteries

Is it a common, or uncommon condition?
Uncommon

Who is the typical
A male between

Is there a racial pre
No

PAN is strongly associated with seropositivity for what virus?
Hepatitis B

sculitides has PUK been associated?

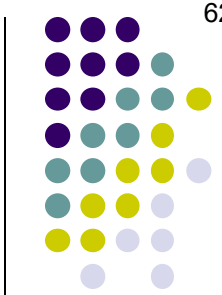
JK?
nd **polyarteritis nodosa**

What is the typical presentation of PAN? (Note: It's not ophthalmic.)
Constitutional symptoms: Fever, fatigue, weight loss. Renal vasculitis resulting in secondary HTN is common.

What proportion of PAN pts develop ophthalmic involvement?
About 20%

Q

Concerning PUK



With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- Autoimmune
- It often heralds exacerbation of **systemic disease**

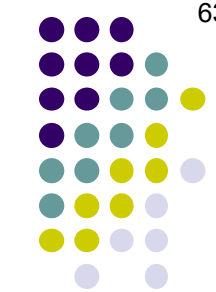
With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, granulomatosis with polyangiitis, and polyarteritis nodosa

If a PUK pt does not carry a CTD/autoimmune diagnosis, what should the ophthalmologist do?

A

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

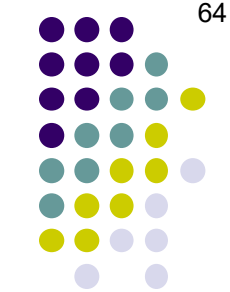
With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, granulomatosis with polyangiitis, and polyarteritis nodosa

If a PUK pt does not carry a CTD/autoimmune diagnosis, what should the ophthalmologist do?
Initiate a diagnostic workup (or promptly arrange for a rheumatologist to do so)

Q

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

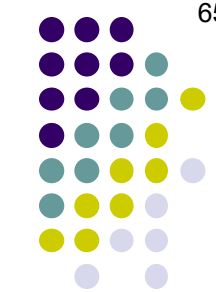
Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, granulomatosis with polyangiitis, and polyarteritis nodosa

If a PUK pt does not carry a CTD/autoimmune diagnosis, what should the ophthalmologist do?
Initiate a **diagnostic workup** (or promptly arrange for a rheumatologist to do so)

If the workup is negative, what non-autoimmune diagnosis should you consider?

A

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, granulomatosis with polyangiitis, and polyarteritis nodosa

If a PUK pt does not carry a CTD/autoimmune diagnosis, what should the ophthalmologist do?
Initiate a **diagnostic workup** (or promptly arrange for a rheumatologist to do so)

If the workup is negative, what non-autoimmune diagnosis should you consider?
Infectious PUK

Q

Concerning PUK

- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, granulomatosis with polyangiitis, and polyarteritis nodosa

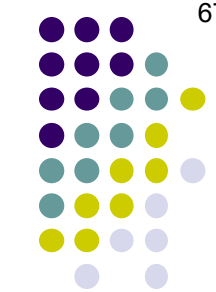
If a PUK pt does not carry a CTD/autoimmune diagnosis, what should the ophthalmologist do?
Initiate a **diagnostic workup** (or promptly arrange for a rheumatologist to do so)

If the workup is negative, what non-autoimmune diagnosis should you consider?
Infectious PUK

If the PUK is associated with copious mucopurulent discharge, what infectious etiology should you consider?

A

Concerning PUK



- Autoimmune

With what general category of autoimmune dz is PUK associated?
Connective-tissue dz, especially vasculitides

- It often heralds exacerbation of **systemic disease**

With which connective-tissue diseases (CTDs) and/or vasculitides has PUK been associated?
Pretty much all of them

Which three conditions are most likely to present with PUK?
Rheumatoid arthritis, granulomatosis with polyangiitis, and polyarteritis nodosa

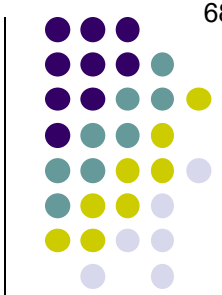
If a PUK pt does not carry a CTD/autoimmune diagnosis, what should the ophthalmologist do?
Initiate a **diagnostic workup** (or promptly arrange for a rheumatologist to do so)

If the workup is negative, what non-autoimmune diagnosis should you consider?
Infectious PUK

If the PUK is associated with copious mucopurulent discharge, what infectious etiology should you consider?
Gonococcal disease

Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:

  1) Improve

  2) Promote via 4 treatment maneuvers

  3) Suppress

A

Concerning PUK

- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:

  1) Improve wetting

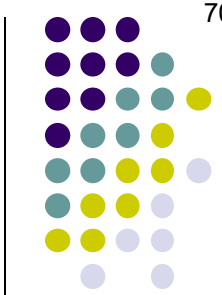
  2) Promote re-epithelialization via lubes, BCL, patching, glue

  ↕ *(bandage contact lens)*

  3) Suppress systemic inflammation

Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:

  1) **Improve wetting**

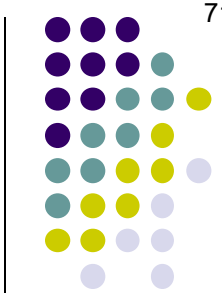
  2) **Promote re-epithelialization**

  3) **Suppress systemic inflammation**

Of these three maneuvers, which is paramount?

A

Concerning PUK



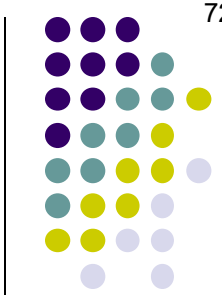
- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via

Of these three maneuvers, which is paramount? Controlling the underlying disease process-- without this, the other maneuvers are akin to re-arranging the deck chairs on the *Titanic*

3) **Suppress systemic inflammation**

Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:

  1) Improve wetting

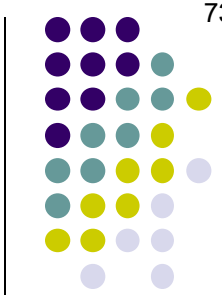
  2) Promote re-epithelialization via kubes, BCL, patching, glue

  3) Suppress systemic inflammation if local maneuvers are

How should one improve wetting?

A

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:

  1) Improve wetting

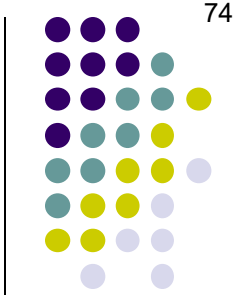
  2) Promote re-epithelialization via kubes, BCL, patching, glue

  3) Suppress systemic inflammation if local maneuvers are

How should one improve wetting?
With frequent dosing of preservative-free artificial tears (PF ATs)

Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:

  1) Improve wetting

  2) Promote re-epithelialization via kubes, BCL, patching, glue

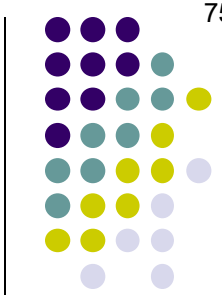
  3) Suppress systemic inflammation if local maneuvers are

How should one improve wetting?
With frequent dosing of preservative-free artificial tears (PF ATs)

In addition to improving wetting, what other benefit derives from frequent PF AT use?

A

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:

  1) Improve wetting

  2) Promote re-epithelialization via [illegible] BCL, patching, glue

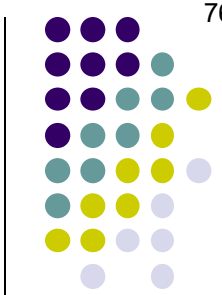
  3) Suppress systemic inflammation if local maneuvers are

How should one improve wetting?
With frequent dosing of preservative-free artificial tears (PF ATs)

In addition to improving wetting, what other benefit derives from frequent PF AT use?
They will remove inflammatory cytokines from the ocular surface

Q

Concerning PUK

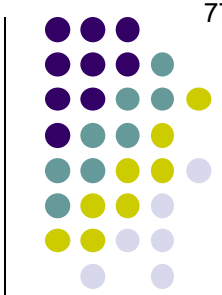


- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, **glue**

What specific sort of glue is being referred to here?

A

Concerning PUK

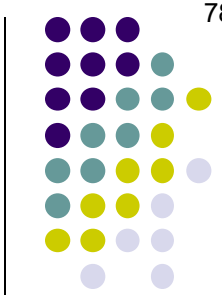


- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, **glue**

What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

Q

Concerning PUK



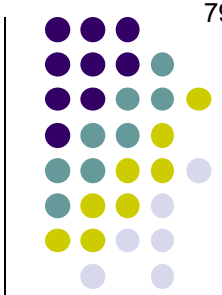
- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, **glue**

What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

How does glue assist in PUK healing?
1)
2)

A

Concerning PUK

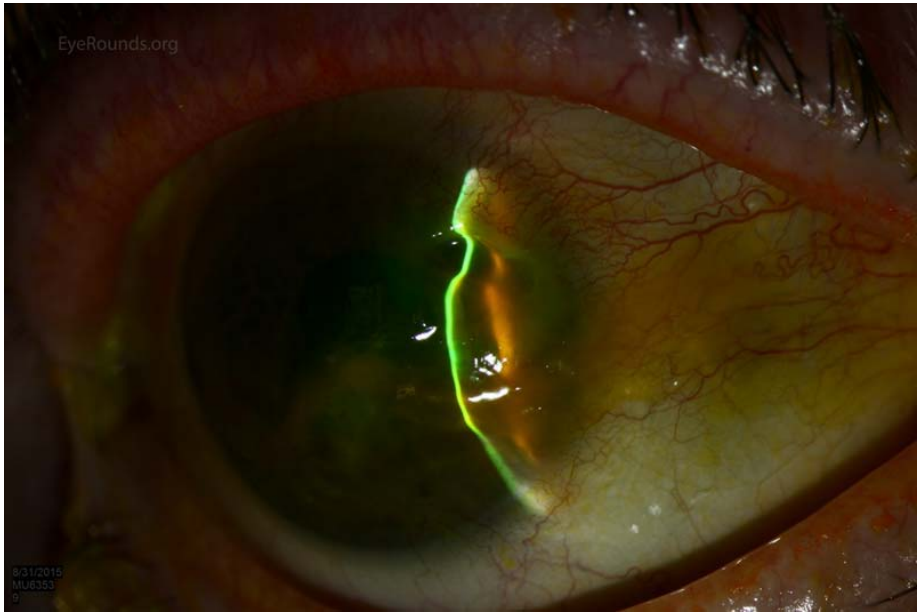


- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, **glue**

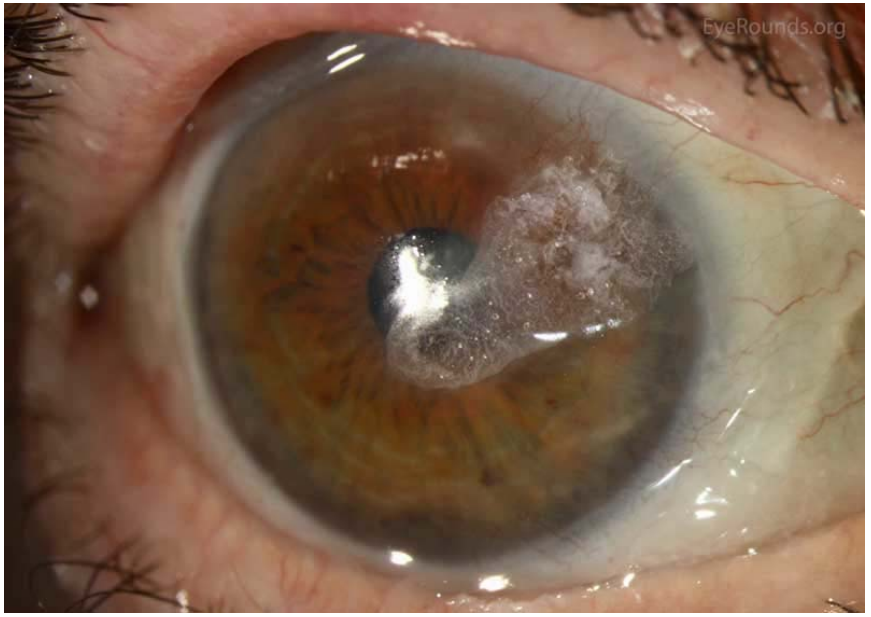
What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

How does glue assist in PUK healing?
1) It provides tectonic stability, thereby reducing the risk of perforation
2) It acts as a barrier preventing PMNs from reaching (and destroying) corneal stroma

Concerning PUK



Just prior to perfing

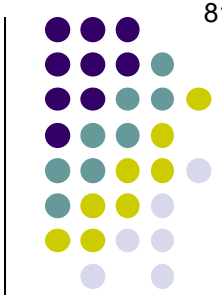


Same eye s/p gluing (and on IMT)

PUK in RA

Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, **glue**

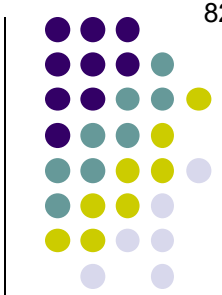
What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

How does glue assist in PUK healing?
1) It provides tectonic stability, thereby reducing the risk of perforation
2) It acts as a barrier preventing PMNs from reaching (and destroying) corneal stroma

Use of cyanoacrylate adhesive mandates that what other therapeutic maneuver be applied as well?

A

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, **BCL**, patching, **glue**

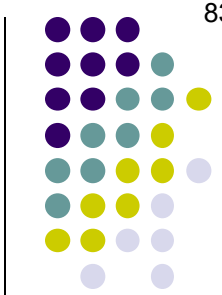
What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

How does glue assist in PUK healing?
1) It provides tectonic stability, thereby reducing the risk of perforation
2) It acts as a barrier preventing PMNs from reaching (and destroying) corneal stroma

Use of cyanoacrylate adhesive mandates that what other therapeutic maneuver be applied as well?
A BCL must be placed over the glued cornea

Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, **BCL**, patching, **glue**

What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

How does glue assist in PUK healing?
1) It provides tectonic stability, thereby reducing the risk of perforation
2) It acts as a barrier preventing PMNs from reaching (and destroying) corneal stroma

Use of cyanoacrylate adhesive mandates that what other therapeutic maneuver be applied as well?
A BCL must be placed over the glued cornea

Use of a BCL mandates that what other therapeutic maneuver be applied as well?

A

Concerning PUK

- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, **BCL**, patching, **glue**

What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

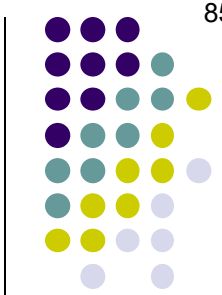
How does glue assist in PUK healing?
1) It provides tectonic stability, thereby reducing the risk of perforation
2) It acts as a barrier preventing PMNs from reaching (and destroying) corneal stroma

Use of cyanoacrylate adhesive mandates that what other therapeutic maneuver be applied as well?
A BCL must be placed over the glued cornea

Use of a BCL mandates that what other therapeutic maneuver be applied as well?
An antibiotic drop should be used to prophylax against the possibility of a BCL-induced bacterial superinfection

Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, **BCL**, patching, **glue**

What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

How does glue assist in PUK healing?
1) It provides tectonic stability, thereby reducing the risk of perforation
2) It acts as a barrier preventing PMNs from reaching (and destroying) corneal stroma

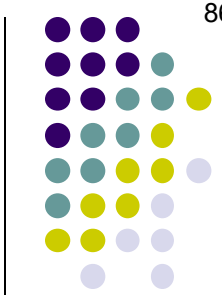
Use of cyanoacrylate adhesive mandates that what other therapeutic maneuver be applied as well?
A BCL must be placed over the glued cornea

Use of a BCL mandates that what other therapeutic maneuver be applied as well?
An antibiotic drop should be used to prophylax against the possibility of a BCL-induced **bacterial superinfection**

What bacteria species must you be certain is adequately covered by the antibiotic?

A

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, **BCL**, patching, **glue**

What specific sort of glue is being referred to here?
Cyanoacrylate adhesive

How does glue assist in PUK healing?
1) It provides tectonic stability, thereby reducing the risk of perforation
2) It acts as a barrier preventing PMNs from reaching (and destroying) corneal stroma

Use of cyanoacrylate adhesive mandates that what other therapeutic maneuver be applied as well?
A BCL must be placed over the glued cornea

Use of a BCL mandates that what other therapeutic maneuver be applied as well?
An antibiotic drop should be used to prophylax against the possibility of a BCL-induced **bacterial superinfection**

What bacteria species must you be certain is adequately covered by the antibiotic? **Pseudomonas**

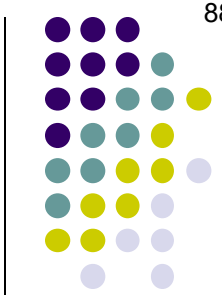
Q

Concerning PUK

- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping [common ocular drug], which can delay re-epithelialization. As a general rule: If the cornea is significantly thinned, avoid [same drug].
  3) Suppress systemic inflammation

A

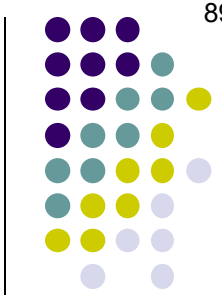
Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping topical steroids, which can delay re-epithelialization. As a general rule: If the cornea is significantly thinned, avoid topical steroids.
  3) Suppress systemic inflammation

Q

Concerning PUK

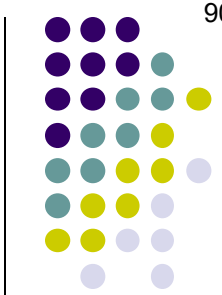


- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping topical steroids, which can delay re-epithelialization. As a general rule: If the cornea is significantly thinned, avoid topical steroids.
  3) Suppress systemic inflammation
  4) Conj flap over the peripheral defect?

What about using a conj flap to cover the peripheral defect?

A

Concerning PUK



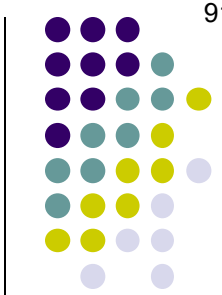
- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping topical steroids, which can delay re-epithelialization. As a general rule: If the cornea is significantly thinned, avoid topical steroids.
  3) Suppress systemic inflammation

4) Conj flap over the peripheral defect? NO!

What about using a conj flap to cover the peripheral defect?
Conj flaps are contraindicated in autoimmune PUK because they bring the conj vasculature (and thus all those nasty blood-borne inflammatory mediators) even closer to the melt

Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping topical steroids, which can delay re-

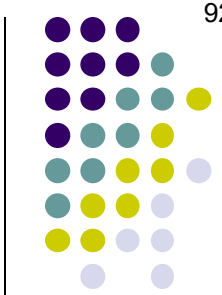
In what clinical scenario might a conj flap over a PUK defect be an appropriate treatment maneuver?

  3) Suppress systemic inflammation
  4) Conj flap over the peripheral defect? YES!

What about using a conj flap to cover the peripheral defect?
Conj flaps are contraindicated in autoimmune PUK because they bring the conj vasculature (and thus all those nasty blood-borne inflammatory mediators) even closer to the melt

A/Q

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping topical steroids, which can delay re-

In what clinical scenario might a conj flap over a PUK defect be an appropriate treatment maneuver?
In **infectious** PUK, especially when the organism is type of bug

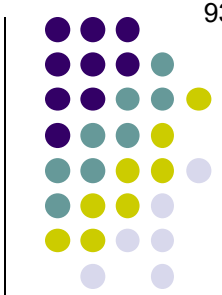
  3) Suppress systemic inflammation

4) Conj flap over the peripheral defect? YES!

What about using a conj flap to cover the peripheral defect?
Conj flaps are contraindicated in autoimmune PUK because they bring the conj vasculature (and thus all those nasty blood-borne inflammatory mediators) even closer to the melt

A

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping topical steroids, which can delay re-

In what clinical scenario might a conj flap over a PUK defect be an appropriate treatment maneuver?
In **infectious** PUK, especially when the organism is **fungal**

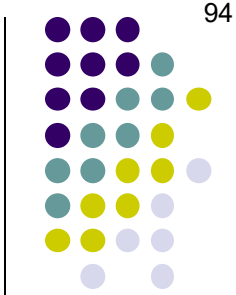
  3) Suppress systemic inflammation

4) Conj flap over the peripheral defect? YES!

What about using a conj flap to cover the peripheral defect?
Conj flaps are contraindicated in autoimmune PUK because they bring the conj vasculature (and thus all those nasty blood-borne inflammatory mediators) even closer to the melt

Q

Concerning PUK



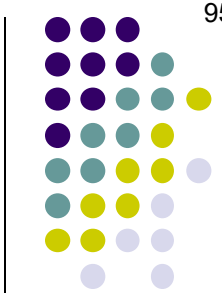
- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping topical steroids, which can delay re-epithelialization. As a general rule: If the cornea is significantly thinned, avoid topical steroids.
  3) Suppress systemic inflammation
  4) Conj surgery:

What about using a conj flap to cover the peripheral defect?
Conj flaps are contraindicated in autoimmune PUK because they bring the conj vasculature (and thus all those nasty blood-borne inflammatory mediators) even closer to the melt

What conj surgery **is** *very helpful in autoimmune PUK?*

A

Concerning PUK



- Autoimmune PUK is usually unilateral and sectoral
- It often heralds exacerbation of systemic disease
- The treatment goal is to stop K melting through 3 maneuvers:
  1) Improve wetting
  2) Promote re-epithelialization via lubes, BCL, patching, glue
     - You should also consider stopping topical steroids, which can delay re-epithelialization. As a general rule: If the cornea is significantly thinned, avoid topical steroids.
  3) Suppress systemic inflammation
  4) Conj surgery: Sectoral conj resection

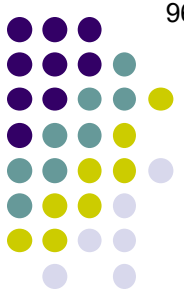
What about using a conj flap to cover the peripheral defect?
Conj flaps are contraindicated in autoimmune PUK because they bring the conj vasculature (and thus all those nasty blood-borne inflammatory mediators) even closer to the melt

What conj surgery **is** *very helpful in autoimmune PUK?*
Sectoral conj resection (ie, cutting the conj **away** from the PUK zone) can be very effective

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)



- Saddle-nose deformity (2):

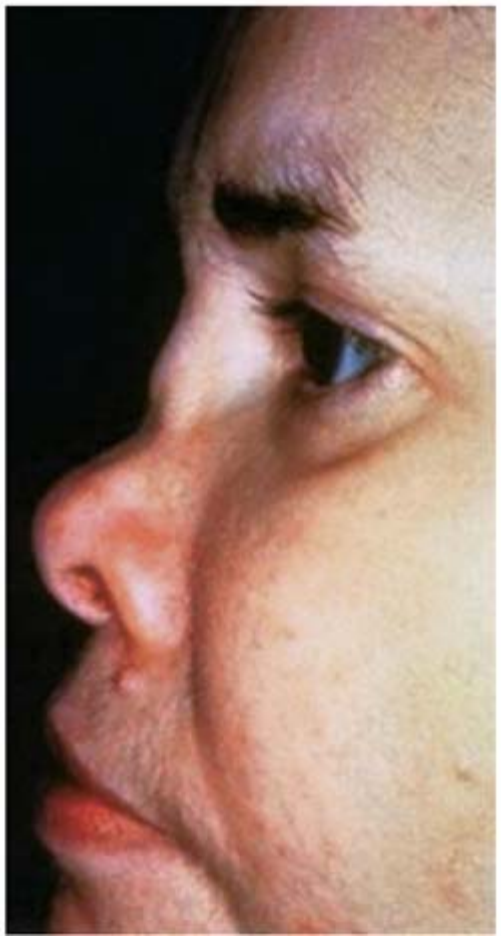
A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP

Concerning PUK



Saddle-nose deformity

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- **Saddle-nose deformity** (2): RP; GwP

If a pt with a saddle nose had interstitial keratitis rather than PUK, what diagnosis should you consider?

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

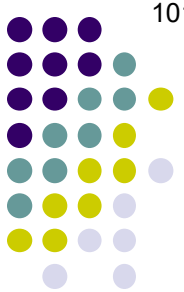
- **Saddle-nose deformity** (2): RP; GwP

If a pt with a saddle nose had interstitial keratitis rather than PUK, what diagnosis should you consider?
Congenital syphilis

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)



- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia:

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae:

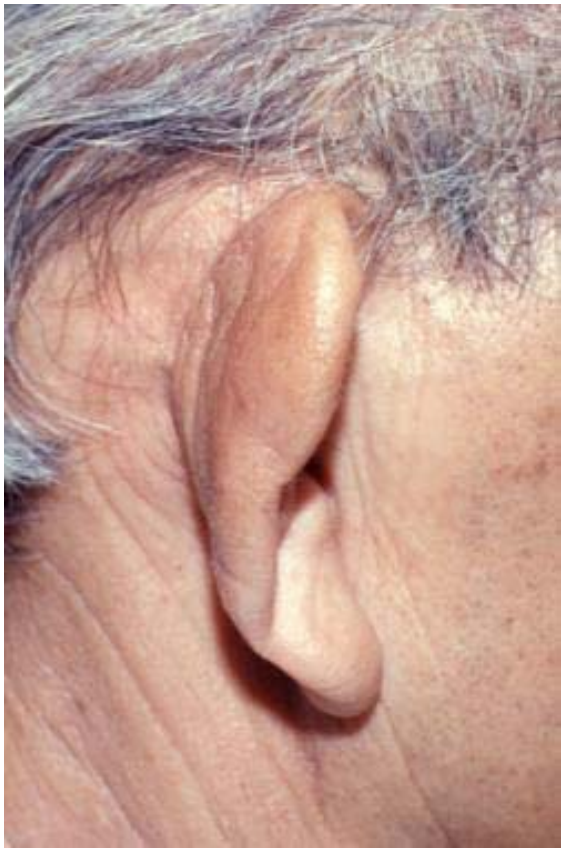
A

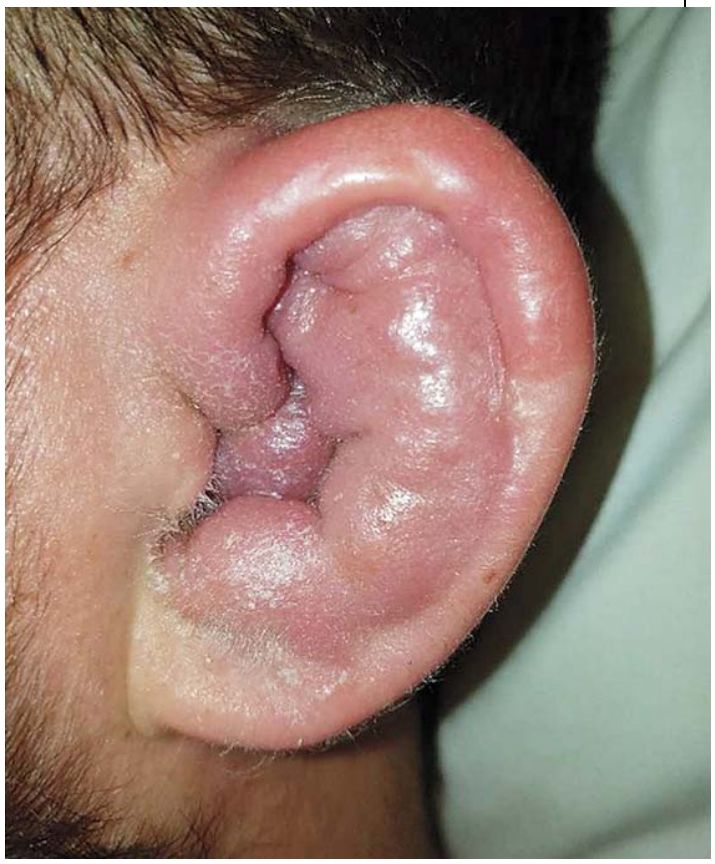
For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP

Concerning PUK





Auricular damage in RP

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2):

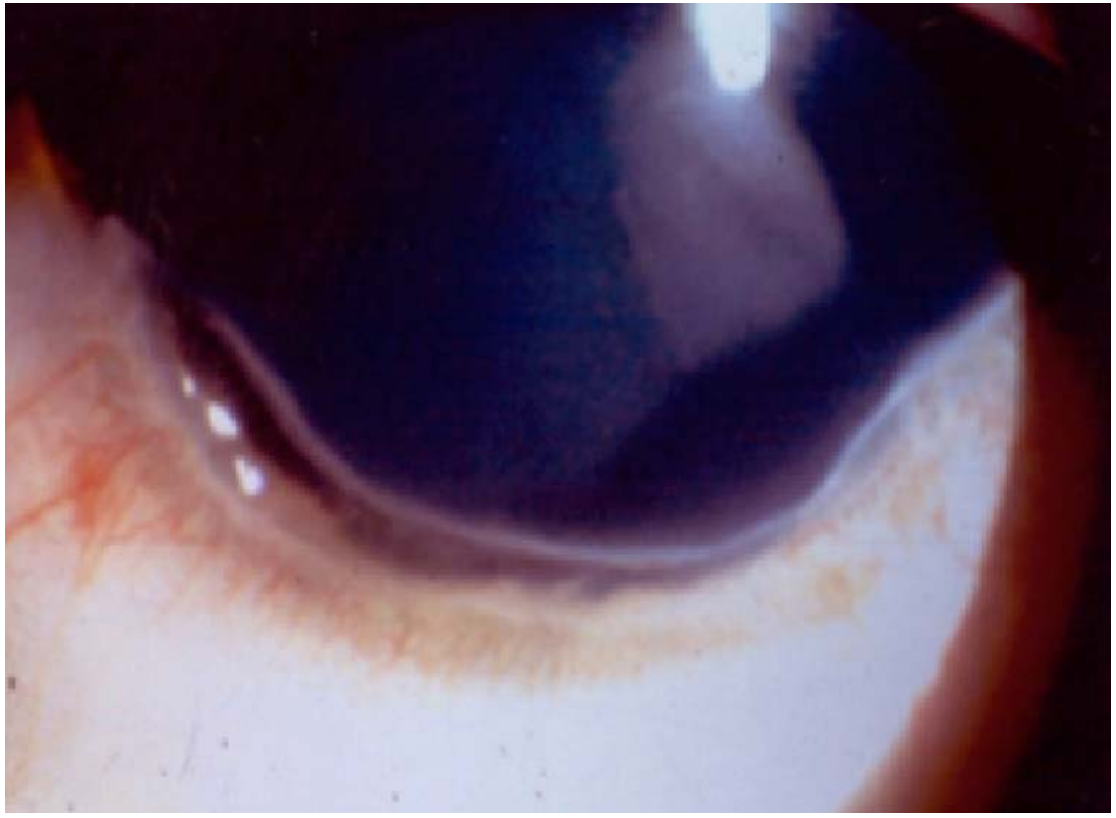
A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN

Concerning PUK



Mooren’s ulcer. Note the overhanging edge.

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN

What is the classic description regarding the pattern of progression for PUK in both Mooren's and PAN?

A/G

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN

What is the classic description regarding the pattern of progression for PUK in both Mooren's and PAN?

1) Starts [ ] then
2) progresses [ ] then
3) progresses [ ]

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN

What is the classic description regarding the pattern of progression for PUK in both Mooren's and PAN?

1) Starts **sectoral**, then
2) progresses **circumferentially**, then
3) progresses **centrally**

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved:

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU

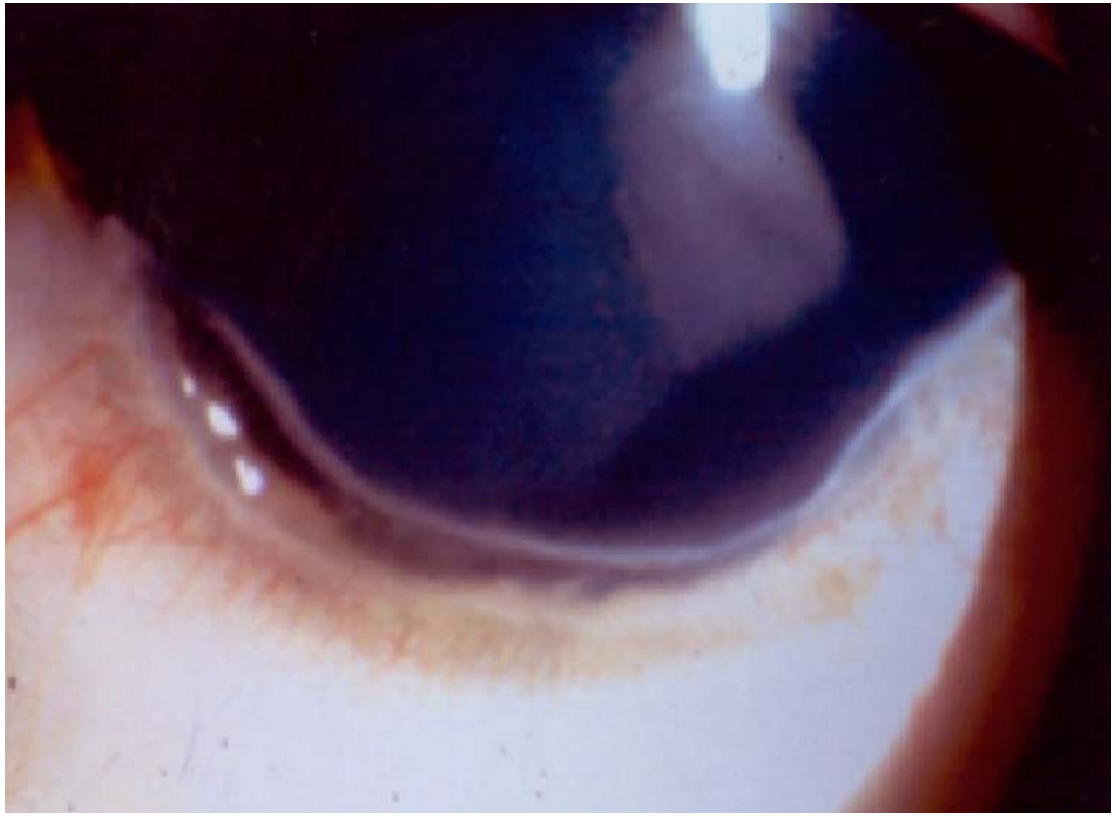
For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- **Sclera *never* involved: MU**

Take note! This is a key factor differentiating between Mooren's and other forms of PUK.

Concerning PUK



Mooren’s ulcer. Note the adjacent sclera is totally quiet

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2):

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS *(**Hey, what about PAN??!!** Un momento, por favor)*

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS

What does ANCA stand for?

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS

What does ANCA stand for?
Antineutrophil cytoplasmic antibodies

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS

What does ANCA stand for?
Antineutrophil cytoplasmic antibodies

What are they?

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS

What does ANCA stand for?
Antineutrophil cytoplasmic antibodies

What are they?
Autoantibodies against antigens found within the cytoplasm of neutrophils

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS

What does ANCA stand for?
Antineutrophil cytoplasmic antibodies

What are they?
Autoantibodies against antigens found within the cytoplasm of neutrophils

With which specific ANCA pattern is each condition associated?
Granulomatosis with polyangiitis:
Churg-Strauss:

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS

What does ANCA stand for?
Antineutrophil cytoplasmic antibodies

What are they?
Autoantibodies against antigens found within the cytoplasm of neutrophils

With which specific ANCA pattern is each condition associated?
Granulomatosis with polyangiitis: Cytoplasmic (c-ANCA)
Churg-Strauss: Perinuclear (p-ANCA)

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN?*

What about PAN? I thought it was ANCA-positive as well.

A/G

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN) | **Relapsing polychondritis (RP)**
Rheumatoid arthritis (RA) | **Granulomatosis with polyangiitis (GwP)**
Mooren's ulcer (MU) | **Churg-Strauss (CS)**

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN?*

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually separate disease entities. Thus, PAN was subdivided into several conditions:
-- word + abb. which affects only medium- and small-sized 'muscular' arteries; and
-- two words, which affects smaller arteries, arterioles, capillaries and venules.

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN?*

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually separate disease entities. Thus, PAN was subdivided into several conditions:
--*Classic PAN*, which affects only medium- and small-sized 'muscular' arteries; and
--*Microscopic polyangiitis*, which affects smaller arteries, arterioles, capillaries and venules.

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN?*

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually separate disease entities. Thus, PAN was subdivided into several conditions:
--*Classic PAN*, which affects only medium- and small-sized 'muscular' arteries; and
--*Microscopic polyangiitis*, which affects smaller arteries, arterioles, capillaries and venules.
It turns out microscopic polyangiitis is strongly ANCA-positive, but classic PAN is not. (Because of its ANCA-positivity, microscopic angiitis is now considered to be more closely related to Churg-Strauss, and especially granulomatosis with polyangiitis, than it is to PAN).

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN?*

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually separate disease entities. Thus, PAN was subdivided into several conditions:
--*Classic PAN*, which affects only medium- and **small-sized** 'muscular' arteries; and
--*Microscopic polyangiitis*, which affects **smaller arteries**, arterioles, capillaries and venules.
It turns out microsco ts ANCA-positivity, microscopi especially granulomatosis with

What's the difference between a 'small-sized' artery and a 'smaller' artery?

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN?*

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually separate disease entities. Thus, PAN was subdivided into several conditions:
--*Classic PAN*, which affects only medium- and **small-sized** 'muscular' arteries; and
--*Microscopic polyangiitis*, which affects **smaller arteries**, arterioles, capillaries and venules.
It turns out microsco ANCA-positivity, microscopi especially granulomatosis with

What's the difference between a 'small-sized' artery and a 'smaller' artery?
Rule of thumb: Classic PAN only affects arteries large enough to be named, whereas microscopic angiitis only affects vessels smaller than that.

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN?*

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually separate disease entities. Thus, PAN was subdivided into several conditions:
--*Classic PAN*, which affects only medium- and small-sized 'muscular' arteries; and
--*Microscopic polyangiitis*, which affects smaller arteries, arterioles, capillaries and venules.
It turns out microscopic polyangiitis is strongly ANCA-positive, but classic PAN is not. (Because of its ANCA-positivity, microscopic angiitis is now considered to be more closely related to Churg-Strauss, and especially granulomatosis with polyangiitis, than it is to PAN).

Got it. So if it's ANCA+ it's not PAN, right?

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN (10% of cases)

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually separate disease entities. Thus, PAN was subdivided into several conditions:
--*Classic PAN*, which affects only medium- and small-sized 'muscular' arteries; and
--*Microscopic polyangiitis*, which affects smaller arteries, arterioles, capillaries and venules.
It turns out microscopic polyangiitis is strongly ANCA-positive, but classic PAN is not. (Because of its ANCA-positivity, microscopic angiitis is now considered to be more closely related to Churg-Strauss, and especially granulomatosis with polyangiitis, than it is to PAN).

Got it. So if it's ANCA+ it's not PAN, right?
Unfortunately, no. Per the BCSC *Uveitis* book, ~10% of PAN pts will be c- or p-ANCA positive.

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN (10% of cases)

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually s…everal conditions:
--***Classic PAN***, which affects …
--***Microscopic polyangiitis***, w…ules.
It turns out microscopic polyangiitis is strongly ANCA-positive, but classic PAN is not. (Because of its ANCA-positivity, microscopic angiitis is now considered to be more closely related to Churg-Strauss, and especially granulomatosis with polyangiitis, than it is to PAN).

OK, tell me this much at least--are both classic PAN and microscopic angiitis associated with PUK?

Got it. So if it's ANCA+ it's not PAN, right?
Unfortunately, no. Per the BCSC Uveitis book, ~10% of PAN pts will be c- or p-ANCA positive.

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN (10% of cases)

What about PAN? I thought it was ANCA-positive as well.
This is a sticky widget. In the 1990s, rheumatologists determined that the label *PAN* was being applied to conditions that were actually s…everal conditions:
--***Classic PAN***, which affects …
--***Microscopic polyangiitis***, w…ules.
It turns out microscopic polyangiitis is strongly ANCA-positive, but classic PAN is not. (Because of its ANCA-positivity, microscopic angiitis is now considered to be more closely related to Churg-Strauss, and especially granulomatosis with polyangiitis, than it is to PAN).

OK, tell me this much at least--are both classic PAN and microscopic angiitis associated with PUK?
Yes

Got it. So if it's ANCA+ it's not PAN, right?
Unfortunately, no. Per the BCSC Uveitis book, ~10% of PAN pts will be c- or p-ANCA positive.

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion:

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3):

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity:

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with **hepatitis seropositivity: PAN**

Which hepatitis virus is definitely *associated with PAN?*

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with **hepatitis seropositivity: PAN**

Which hepatitis virus is definitely *associated with PAN?*
Hepatitis B

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with **hepatitis seropositivity: PAN**

Which hepatitis virus is definitely *associated with PAN?*
Hepatitis B

What percent of PAN pts test positive for are Hep B surface Ag ?

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with **hepatitis seropositivity: PAN**

Which hepatitis virus is definitely *associated with PAN?*
Hepatitis B

What percent of PAN pts test positive for are Hep B surface Ag ?
About 10

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with **hepatitis seropositivity: PAN**

Which hepatitis virus is definitely *associated with PAN?*
Hepatitis B

Which form is probably *associated, but the evidence is not as strong as for B?*

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with **hepatitis seropositivity: PAN**

Which hepatitis virus is definitely *associated with PAN?*
Hepatitis B

Which form is probably *associated, but the evidence is not as strong as for B?*
Hepatitis C

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN
- Associated with helminthic seropositivity:

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN
- Associated with helminthic seropositivity: MU

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Relapsing polychondritis (RP)
Rheumatoid arthritis (RA)
Granulomatosis with polyangiitis (GwP)
Mooren's ulcer (MU)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN
- Associated with helminthic seropositivity: MU
- Renal function may be impaired (4):

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN
- Associated with helminthic seropositivity: MU
- Renal function may be impaired (4): GwP; PAN; CS; RP

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

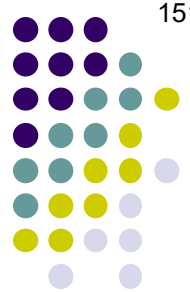
Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN
- Associated with helminthic seropositivity: MU
- Renal function may be impaired (4): GwP; PAN; CS; RP
- Chronic, tx-resistant sinusitis common:

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)



- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN
- Associated with helminthic seropositivity: MU
- Renal function may be impaired (4): GwP; PAN; CS; RP
- Chronic, tx-resistant sinusitis common: GwP

Q

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; PAN
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN
- Associated with helminthic seropositivity: MU
- Renal function may be impaired (4): GwP; PAN; CS; RP
- Chronic, tx-resistant sinusitis common: GwP
- ***Extremely*** painful:

A

For each statement, identify which of these causes of PUK is/are associated (some will more than one answer)

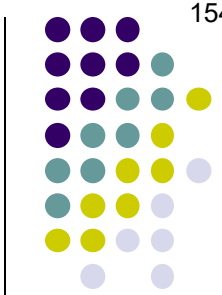
Polyarteritis nodosa (PAN)
Rheumatoid arthritis (RA)
Mooren's ulcer (MU)
Relapsing polychondritis (RP)
Granulomatosis with polyangiitis (GwP)
Churg-Strauss (CS)

- Saddle-nose deformity (2): RP; GwP
- Asthma and eosinophilia: CS
- Deformed auricular pinnae: RP
- Ulcer has overhanging edge (2): MU; PAN
- Sclera never involved: MU
- ANCA positive (2): GwP; CS; *PAN*
- Is a diagnosis of exclusion: MU
- Chest X-ray likely abnormal (3): GwP; CS; RP
- Associated with hepatitis seropositivity: PAN
- Associated with helminthic seropositivity: MU
- Renal function may be impaired (4): GwP; PAN; CS; RP
- Chronic, tx-resistant sinusitis common: GwP
- ***Extremely*** painful: MU

(All forms of inflammatory PUK are painful, but Mooren's is exceptionally so.)

Q

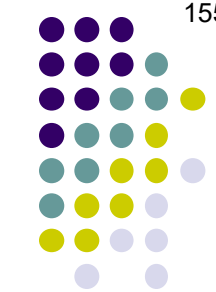
Concerning PUK



- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD *(IBD = Inflammatory bowel disease)*

A

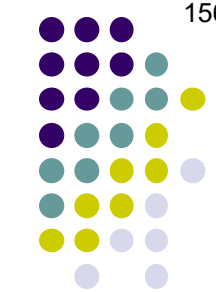
Concerning PUK



- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, **Mooren's**, Behçet, IBD

Q

Concerning PUK

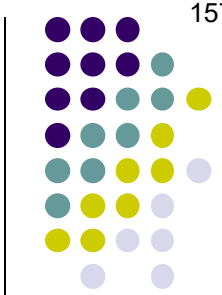


- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, **Mooren's**, Behçet, IBD

Why is Mooren's the oddball in this group?

A

Concerning PUK

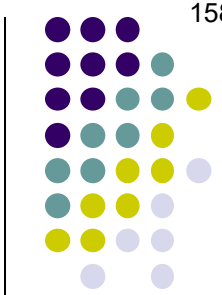


- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, **Mooren's**, Behçet, IBD

Why is Mooren's the oddball in this group?
PUK in the others is due to a systemic condition, whereas Mooren's is, by definition, ocular only

Q

Concerning PUK

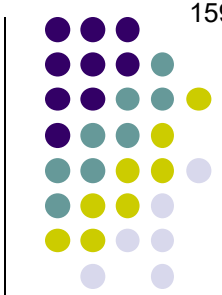


- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

- And in this group?
  - Mooren's, Terrien's marginal, Sarcoid, SLE

A

Concerning PUK

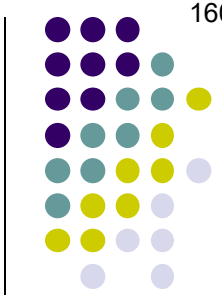


- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Q

Concerning PUK



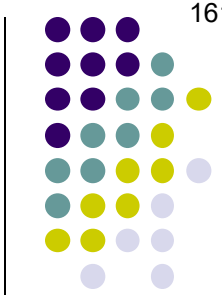
- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Q/A

Concerning PUK



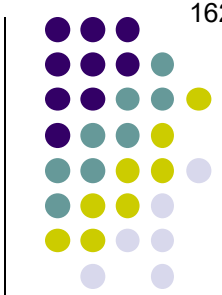
- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an [redacted] process; Terrien's is [redacted]
--

A

Concerning PUK



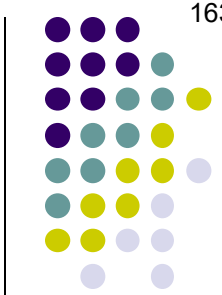
- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--

Q/A

Concerning PUK



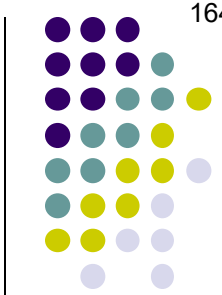
- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is [redacted] in PUK. In contrast, the epithelium is [redacted] in Terrien's.

A

Concerning PUK



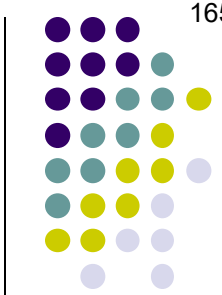
- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK



- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

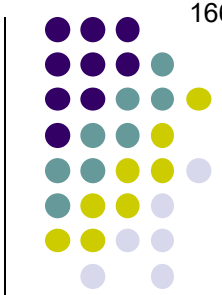
- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

If the epithelium is intact, what is going on that puts Terrien's on the DDx for PUK?

--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q/A

Concerning PUK



- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

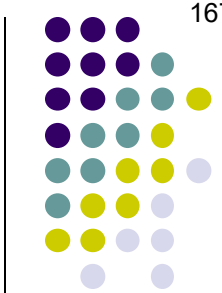
- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

If the epithelium is intact, what is going on that puts Terrien's on the DDx for PUK?
Progressive peripheral [redacted] thinning makes the limbal region in Terrien's resemble PUK

--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK



- With respect to manifesting PUK, which of the following doesn't belong, and why?
  - RA, Mooren's, Behçet, IBD

- And in this group?
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

If the epithelium is intact, what is going on that puts Terrien's on the DDx for PUK?
Progressive peripheral **stromal** thinning makes the limbal region in Terrien's resemble PUK

--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

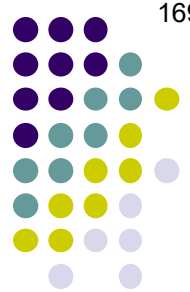
- Wi… f the…
  - I…
- Ar…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.



A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

Uncommon

- Wi f the
  - I
- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

Uncommon

Does it have a gender predilection?

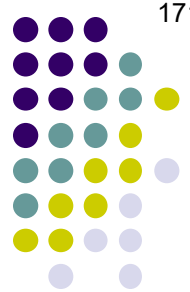
- Wi… f the
  - I…
- Ar…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.



A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

Uncommon

Does it have a gender predilection?

While once thought to be more common in males, it is now considered equal

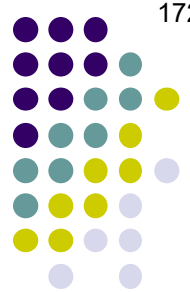
- Wi f the
  - I
- An
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.



Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

Uncommon

Does it have a gender predilection?

While once thought to be more common in males, it is now considered equal

During what life-stage does Terrien's typically first appear?

- Wi… f the…
  - I…
- An…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it have a gender predilection?
While once thought to be more common in males, it is now considered equal

During what life-stage does Terrien's typically first appear?
Young adulthood (late teens - early 30s)

- Wi… f the
  - I…
- Ar…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

Uncommon

Does it have a gender predilection?

While once thought to be more common in males, it is now considered equal

Is it unilateral, or bilateral?

- Wi… f the
  - I…
- An…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

Uncommon

Does it have a gender predilection?

While once thought to be more common in males, it is now considered equal

Is it unilateral, or bilateral?

Bilateral (although involvement can be strikingly asymmetric)

- Wi… f the
  - I…
- An…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

Uncommon

Does it have a gender predilection?

While once thought to be more common in males, it is now considered equal

Is it unilateral, or bilateral?

Bilateral (although involvement can be strikingly asymmetric)

Which sector of the cornea is involved first, and how does it progress from there?

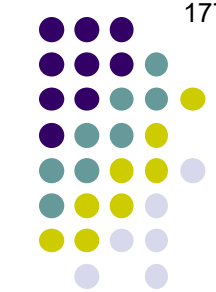
- Wi… f the…
  - I…
- An…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.



A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it have a gender predilection?
While once thought to be more common in males, it is now considered equal

Is it unilateral, or bilateral?
Bilateral (although involvement can be strikingly asymmetric)

Which sector of the cornea is involved first, and how does it progress from there?
It starts superonasally, then spreads circumferentially

- Wi… f the
  - I…
- Ar…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it have a gender predilection?
While once thought to be more common in males, it is now considered equal

Is it unilateral, or bilateral?
Bilateral (although involvement can be strikingly asymmetric)

Which sector of the cornea is involved first, and how does it progress from there?
It starts superonasally, then spreads circumferentially

Does it affect vision? If so, how?

- Wi… f the…
  - I…
- An…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it have a gender predilection?
While once thought to be more common in males, it is now considered equal

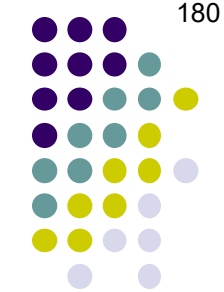
Is it unilateral, or bilateral?
Bilateral (although involvement can be strikingly asymmetric)

Which sector of the cornea is involved first, and how does it progress from there?
It starts superonasally, then spreads circumferentially

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

- Wi… f the…
  - I…
- Ar…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.



Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

The key to diagnosing Terrien's is its classic appearance:
--The epithelium is [redacted], as noted earlier

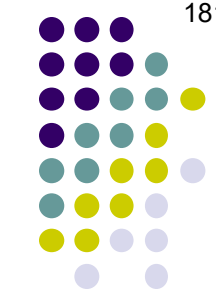
- I

Which sector of the cornea is involved first, and how does it progress from there?
It starts superonasally, then spreads circumferentially

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.



A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

- *The key to diagnosing Terrien's is its classic appearance:*
  --The epithelium is **intact** , as noted earlier

- *Which sector of the cornea is involved first, and how does it progress from there?*
  It starts superonasally, then spreads circumferentially

  Does it affect vision? If so, how?
  Yes, by inducing high astigmatism

- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

The key to diagnosing Terrien's is its classic appearance:
--The epithelium is **intact** , as noted earlier
--The **leading edge** of the thinned area is characterized by the presence of…

- I

Which sector of the cornea is involved first, and how does it progress from there?
It starts superonasally, then spreads circumferentially

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

- *The key to diagnosing Terrien's is its classic appearance:*
  --The epithelium is **intact** , as noted earlier
  --The **leading edge** of the thinned area is characterized by the presence of…**Lipid**

- I

Which sector of the cornea is involved first, and how does it progress from there?
It starts superonasally, then spreads circumferentially

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

The key to diagnosing Terrien's is its classic appearance:
--The epithelium is **intact** , as noted earlier
--The **leading edge** of the thinned area is characterized by the presence of…**Lipid**
--The **trailing portion** is characterized by the presence of a… two words

- I

Which sector of the cornea is involved first, and how does it progress from there?
It starts superonasally, then spreads circumferentially

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

- *The key to diagnosing Terrien's is its classic appearance:*
  --The epithelium is **intact** , as noted earlier
  --The **leading edge** of the thinned area is characterized by the presence of…**Lipid**
  --The **trailing portion** is characterized by the presence of a…**Vascular pannus**
  - I

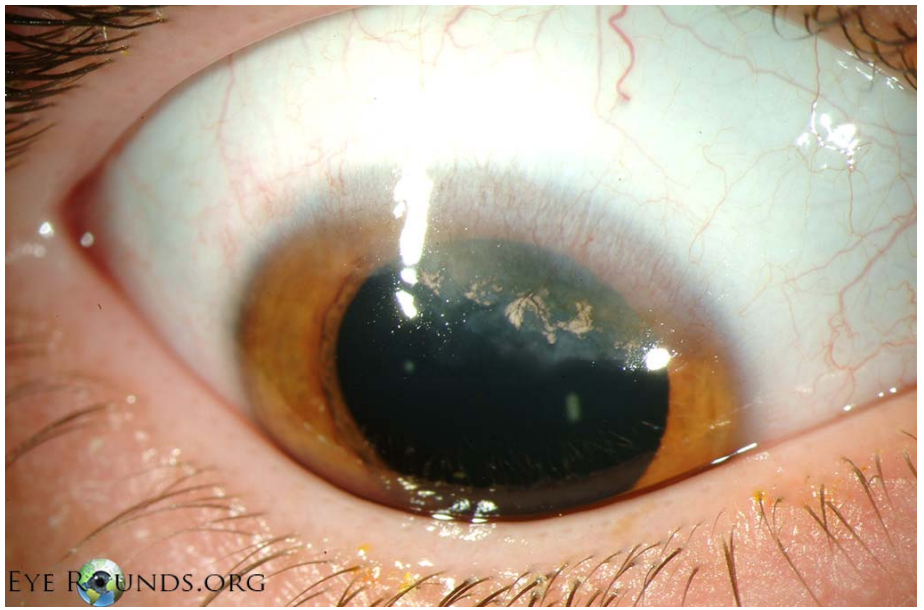
Which sector of the cornea is involved first, and how does it progress from there?
It starts superonasally, then spreads circumferentially

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Concerning PUK



Terrien marginal degeneration. Note the leading lipids and the trailing pannus

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?

Uncommon

The key to diagnosing Terrien's is its classic appearance:

--The epithelium is **intact** , as noted earlier

--The **leading edge** of the thinned area is characterized by the presence of…**Lipid**

--The **trailing portion** is characterized by the presence of a…**Vascular pannus**

Remember this!!! Consider it your tl;dr for Terrien's

Does it affect vision? If so, how?

Yes, by inducing high astigmatism

- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it ha
While onc ered equal

Is it unilate
Bilateral (a

Which sec ess from there?
It starts su

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

Does Terrien's render the cornea significantly thinner than normal?

- Wi f the
  - I
- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it ha
While onc ered equal

Is it unilate
Bilateral (a

Which sec ess from there?
It starts su

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

Does Terrien's render the cornea significantly thinner than normal?
Yes

- Wi f the
  - I
- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it ha
While onc ered equal

Is it unilate
Bilateral (a

Which sec ess from there?
It starts su

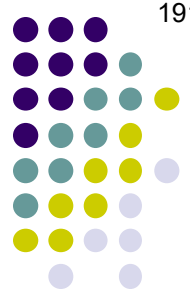
Does it affect vision? If so, how?
Yes, by inducing high astigmatism

Does Terrien's render the cornea significantly thinner than normal?
Yes

Is the thinned Terrien's cornea at risk for rupture with mild trauma?

- Wi f the
  - I
- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.



A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it ha
While onc ered equal

Is it unilate
Bilateral (a

Which sec ess from there?
It starts su

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

Does Terrien's render the cornea significantly thinner than normal?
Yes

Is the thinned Terrien's cornea at risk for rupture with mild trauma?
Yes

- Wi f the
  - I
- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it ha
While onc ered equal

Is it unilate
Bilateral (a

Which sec ess from there?
It starts su

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

Does Terrien's render the cornea significantly thinner than normal?
Yes

Is the thinned Terrien's cornea at risk for rupture with mild trauma?
Yes

Do Terrien pts need to wear protective eyewear?

- Wi f the
  - I
- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK

Speaking of Terrien's…

Is it a common, or an uncommon condition?
Uncommon

Does it ha
While onc ered equal

Is it unilate
Bilateral (a

Does Terrien's render the cornea significantly thinner than normal?
Yes

Is the thinned Terrien's cornea at risk for rupture with mild trauma?
Yes

Which sec ess from there?
It starts su

Do Terrien pts need to wear protective eyewear?
Yes

Does it affect vision? If so, how?
Yes, by inducing high astigmatism

- Wi f the
  - I
- Ar
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?
Two reasons:
--PUK in the others is an inflammatory process; Terrien's is noninflammatory
--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

Q

Concerning PUK

Speaking of Terrien's?

Is it a common, or an uncommon condition?

Uncommon

Does Terrien's render the cornea significantly thinner than normal?

Yes

There is a lookalike condition--rarer than Terrien's--which differs in that 1) it is more likely to occur in children, and 2) it is inflammatory in nature. The Cornea book speculates that it might not be a separate condition, but rather a manifestation of the same dz process as Terrien. What is it?

Yes

Does it affect vision? If so, how?

Yes, by inducing high astigmatism

- Wi… f the…
  - I…
- Ar…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

A

Concerning PUK

Speaking of Terrien's?

Is it a common, or an uncommon condition?

Uncommon

Does Terrien's render the cornea significantly thinner than normal?

Yes

There is a lookalike condition--rarer than Terrien's--which differs in that 1) it is more likely to occur in children, and 2) it is inflammatory in nature. The Cornea *book speculates that it* might *not be a separate condition, but rather a manifestation of the same dz process as Terrien. What is it?*

Fuchs' superficial marginal keratitis

Yes

Does it affect vision? If so, how?

Yes, by inducing high astigmatism

- Wi… f the…
  - I…
- Ar…
  - Mooren's, **Terrien's marginal**, Sarcoid, SLE

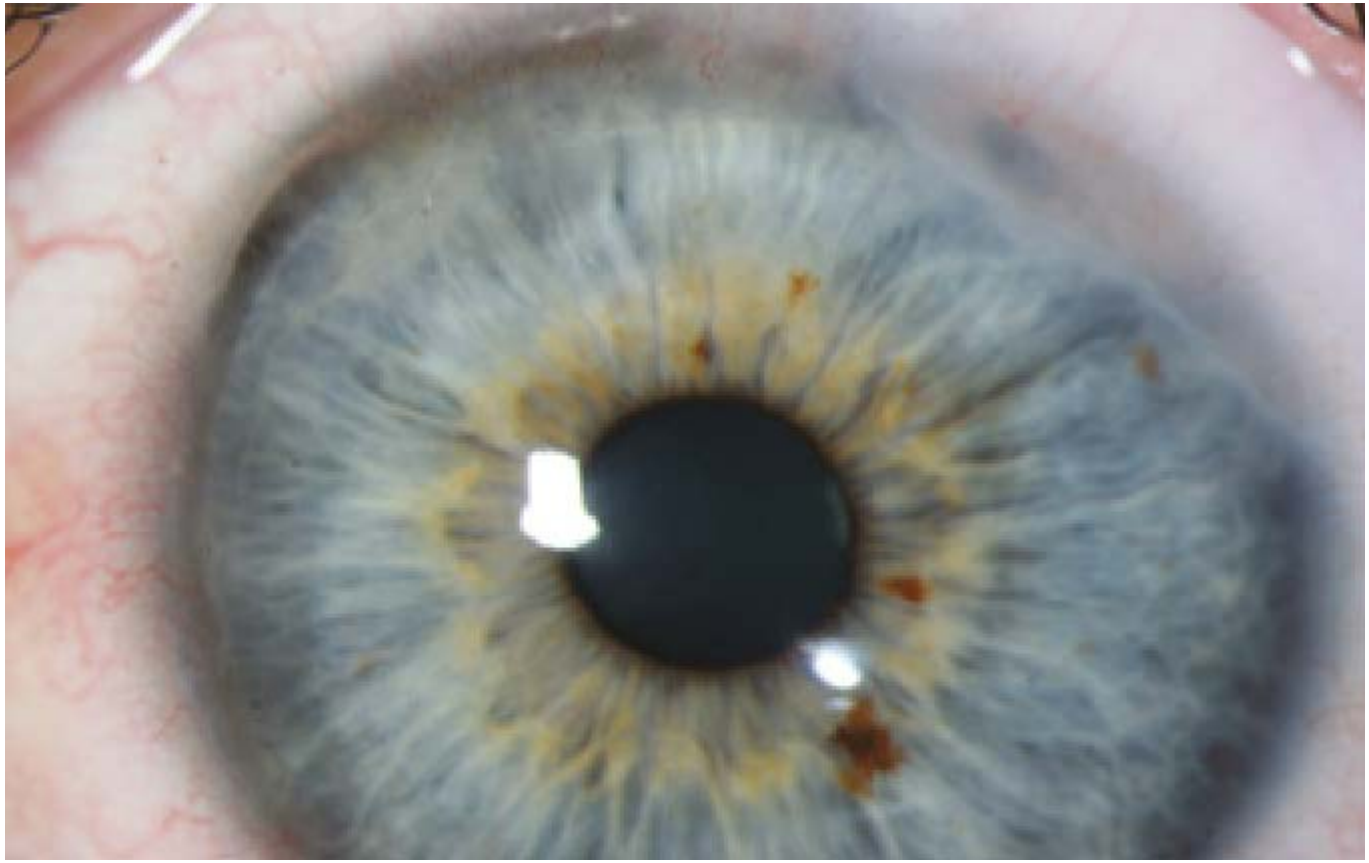
Why is Terrien's the oddball in this group?

Two reasons:

--PUK in the others is an inflammatory process; Terrien's is noninflammatory

--As implied by the word 'ulcerative' in the name, the corneal epithelium is disrupted in PUK. In contrast, the epithelium is **intact** in Terrien's.

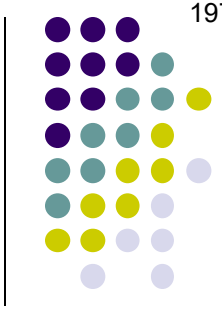
Concerning PUK



Fuchs' superficial marginal keratitis

Q

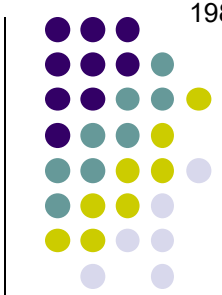
Concerning PUK



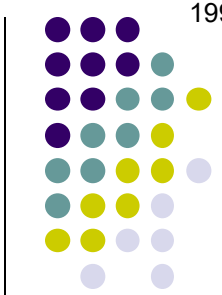
- All of the following are true concerning Mooren's ulcer *except* (could be more than one):
  - Cause is unknown
  - One clinical type presents as a unilateral PUK in the elderly
  - The other type presents as bilateral disease in young African women
  - Patients with the 'African' variety often have a history of systemic helminth infection
  - Mooren's responds readily to aggressive local therapy

A

Concerning PUK



- All of the following are true concerning Mooren's ulcer *except* (could be more than one):
  - Cause is unknown ***T***
  - One clinical type presents as a unilateral PUK in the elderly ***T***
  - The other type presents as bilateral disease in young African ~~women~~ men
  - Patients with the 'African' variety often have a history of systemic helminth infection ***T***
  - Mooren's responds ~~readily~~ poorly to aggressive local therapy



Concerning PUK

- All of the following are true concerning Mooren's ulcer *except* (could be more than one):
  - Cause is unknown ***T***
  - One clinical type presents as a unilateral PUK in the elderly ***T***
  - The other type presents as bilateral disease in young African ~~women~~ men
  - Patients with the 'African' variety often have a history of systemic helminth infection ***T***
  - Mooren's responds ~~readily~~ poorly to aggressive local therapy

Mooren's ulcer is a chronic, progressive PUK. By definition, the cause is unknown. It starts sectorally, progresses circumferentially, then finally centrally. The leading edge is undermined and de-epithelialized. Two clinical varieties are recognized: Unilateral disease in the elderly, and rapidly progressive, severe bilateral disease that strikes young African men. These men usually are seropositive for helminthic disease.

The plethora of treatments stands as gloomy testimony to the relative ineffectiveness of each. Ocular modalities include topical steroids, BCL, *n-acetylcysteine* drops, topical cyclosporine and conjunctival resection. Quite often, systemic immunosuppressives are needed: steroids, MTX, and/or cyclophosphamide.