MacTel

Macular Telangiectasia

The condition called macular telangiectasia (MacTel for short)…
The condition called macular telangiectasia (MacTel for short)… By what four-word (including telangiectasia) name was this condition known back in the day?
The condition called macular telangiectasia (MacTel for short)…By what four-word (including telangiectasia) name was this condition known back in the day? Idiopathic juxtafoveal retinal telangiectasia (you may come across this name in the older literature, is why I’m mentioning this)
Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region of the macula.

Macular Telangiectasia
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region
Parafoveal telangiectasias
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

?????
(The first type is called…)

?????
(The second type is called…)

?????
(The third type is called…)
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
(The first type is called…)

Type 2
(The second type is called…)

Type 3
(The third type is called…)

Macular Telangiectasia...has three subtypes:

Type 1
(The first type is called…)

Type 2
(The second type is called…)

Type 3
(The third type is called…)

Clinically apparent telangiectasias in the parafoveal region
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka... telangiectasia'

Type 2

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...'Aneurysmal telangiectasia'

Type 2

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...'Aneurysmal telangiectasia'
-- uni- v bilateral

Type 2

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1 aka…’Aneurysmal telangiectasia’ --Unilateral

Type 2

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female

Type 2

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female

Type 2

Type 3
MacTel

**Pathology common to all cases:**
Clinically apparent telangiectasias in the parafoveal region

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**Macular Telangiectasia**

...has three subtypes:

- **Type 1**
  - aka…'Aneurysmal telangiectasia'
  - Unilateral
  - Male >> Female

- **Type 2**

- **Type 3**

With regards to test questions on the OKAPs, WQE, and Boards, it's probably safe to assume that **Type 1 MacTel never occurs in females**
MacTel

*Pathology common to all cases:*
Clinically apparent telangiectasias in the parafoveal region

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**Macular Telangiectasia**

...has three subtypes:

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**Type 1**
aka…'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old

**Type 2**

**Type 3**
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old

Type 2

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...’Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--Shape of ‘exudate

Type 2

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka…'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

Type 2

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old

In this context, what does circinate mean?

**Type 2**

**Type 3**

Type 3
(no aka in the Retina book)

Very, very rare
--Bilateral
--Male = Female
--Occlusion of perifoveal capillaries → progressive VA loss
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old

*Circinate*

In this context, what does circinate mean?
It means ‘ring shaped’

**Type 2**

**Type 3**
MacTel

*Pathology common to all cases:*
Clinically apparent telangiectasias in the parafoveal region

---

**Macular Telangiectasia**

...has three subtypes:

---

**Type 1**
aka...'Aneurysmal telangiectasia'
---Unilateral
---Male >> Female
---Young >> old
---'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

---

**Type 2**

---

**Type 3**

---

Type 1 MacTel **TLDR**
MacTel

Type I MacTel OD. Note the classic circinate exudate
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
- Aneurysmal telangiectasia
- Unilateral
- Male >> Female
- Young >> old
- ‘Circinate’ exudate

Type 2

Type 3

A unilateral disease of the retinal vasculature affecting young males, characterized by exudation… what disease does this remind you of?

It should remind you of Coats disease. Coats and MacTel Type 1 are variants of the same condition.
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka 'Aneurysmal telangiectasia'
- Unilateral
- Male >> Female
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Type 3

A unilateral disease of the retinal vasculature affecting young males, characterized by exudation...
what disease does this remind you of?
It should remind you of Coats disease. Coats and MacTel Type 1 are variants of the same condition.
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Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka 'Aneurysmal telangiectasia'
- Unilateral
- Male >> Female
- Young >> old
- 'Circinate' exudate

A unilateral disease of the retinal vasculature affecting young males, characterized by exudation...

Type 2
- Coats and MacTel Type 1 are variants of the same condition.

Type 3

The Retina book states that "MacTel 1 is considered a macular variant of Coats disease."
Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka…’Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--‘Circinate’ exudate

Type 2

Type 3

Does the exudate of Type 1 respond to VEGF inhibitors?

'Unilateral parafoveal telangiectasia in a young male child'
**Unilateral parafoveal telangiectasias** in a young male child

*Pathology common to all cases:*
Clinically apparent *telangiectasias* in the *parafoveal* region

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**Macular Telangiectasia**

...has three subtypes:

**Type 1**
aka...‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--’Circinate’ exudate

‘Unilateral parafoveal telangiectasia in a young male child’

**Type 2**

**Type 3**

*Does the exudate of Type 1 respond to VEGF inhibitors?*
Yes and no

It responds to aflibercept, but not bevacizumab or ranibizumab

---

**Type 2**

*aka*...*juxtafoveal telangiectasia*
--Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations
--Complication: CNVM

**Type 3**

(aka in the Retina book)

Very, very rare
--Bilateral
--Male = Female
--Occlusion of perifoveal capillaries \(\rightarrow\) progressive VA loss

---

MacTel
Unilateral parafoveal telangiectasias in a young male child

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia
...has three subtypes:

Type 1
aka ‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--‘Circinate’ exudate

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no
Huh? Why ‘yes and no’?

Type 2

Type 3

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no
Huh? Why ‘yes and no’?

Macular Telangiectasia

Type 3

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no
Huh? Why ‘yes and no’?

Type 2

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no
Huh? Why ‘yes and no’?

Type 1
aka ‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--‘Circinate’ exudate

‘Unilateral parafoveal telangiectasias in a young male child’
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no

Huh? Why 'yes and no'?
It responds to agent 1, but not agent 2 or agent 3

**Type 2**

**Type 3**

--Unilateral parafoveal telangiectasia in a young male child
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no

Huh? Why 'yes and no'?
It responds to aflibercept, but not bevacizumab or ranibizumab

Type 2

Type 3

Type 3
(no aka in the Retina book)

Very, very rare
--Bilateral
--Male = Female
--Occlusion of perifoveal capillaries \(\rightarrow\) progressive VA loss

Macular Telangiectasia

MacTel 31

Macular Telangiectasia...has three subtypes:

Type 1
aka...Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no

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Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no

Huh? Why 'yes and no'?
It responds to aflibercept, but not bevacizumab or ranibizumab
MacTel

**Pathology common to all cases:**
Clinically apparent telangiectasias in the parafoveal region

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**Macular Telangiectasia**

...has three subtypes:

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**Type 1**
- Aneurysmal telangiectasia
- Unilateral
- Male >> Female
- Young >> old
- ‘Circinate’ exudate

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no

Huh? Why ‘yes and no’?
It responds to aflibercept, but not bevacizumab or ranibizumab

Why does Type 1 respond to aflibercept but not the other agents?

---

**Type 2**

Juxtafoveal telangiectasia
- Most common subtype
- Bilateral
- Male = Female
- Onset 40s - 60s
- Strong association with DM/HTN
- DFE: Fovea with...
- Crystalline retinal deposits
- Foveal cavitations
- Complication: CNVM

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**Type 3**

Type 2 aka...
- Very, very rare
- Bilateral
- Male = Female
- Occlusion of perifoveal capillaries → progressive VA loss

---

Macular Telangiectasia...has three subtypes:

- Type 1
- Aneurysmal telangiectasia
- Unilateral
- Male >> Female
- Young >> old
- ‘Circinate’ exudate

- Type 2
- Juxtafoveal telangiectasia
- Most common subtype
- Bilateral
- Male = Female
- Onset 40s - 60s
- Strong association with DM/HTN
- DFE: Fovea with...
- Crystalline retinal deposits
- Foveal cavitations
- Complication: CNVM

- Type 3
- Type 2 aka...
- Very, very rare
- Bilateral
- Male = Female
- Occlusion of perifoveal capillaries → progressive VA loss
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka…‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--’Circinate’ exudate

'Unilateral parafoveal telangiectasias in a young male child'

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no

Huh? Why 'yes and no'?
**It responds to aflibercept, but not bevacizumab or ranibizumab**

Why does Type 1 respond to aflibercept but not the other agents?
In addition to VEGF, aflibercept also inhibits signaling molecule (three words), whereas the other agents don’t.
Unilateral parafoveal telangiectasias in a young male child

MacTel

Pathology common to all cases: Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka…’Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--’Circinate’ exudate

Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no

Huh? Why ‘yes and no’?
It responds to aflibercept, but not bevacizumab or ranibizumab

Why does Type 1 respond to aflibercept but not the other agents?
In addition to VEGF, aflibercept also inhibits placental growth factor, whereas the other agents don’t.

Type 2

Type 3

Very, very rare
MacTel

**Pathology common to all cases:**
Clinically apparent telangiectasias in the parafoveal region

---

**Macular Telangiectasia**

...has three subtypes:

- **Type 1**
  - Aneurysmal telangiectasia
  - Unilateral
  - Male >> Female
  - Young >> old
  - Circinate exudate
  - Does the exudate of Type 1 respond to VEGF inhibitors? Yes and no
    - It responds to aflibercept, but not bevacizumab or ranibizumab
    - Huh? Why 'yes and no'?
      - Why does Type 1 respond to aflibercept but not the other agents?
    - In addition to VEGF, aflibercept also inhibits placental growth factor, whereas the other agents don't. This anti-PGF activity is believed to account for the effectiveness of aflibercept in MacTel Type 1 (as well as in Coats).

- **Type 2**
- **Type 3**

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MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka ‘Aneurysmal telangiectasia’
-- Unilateral
-- Male >> Female
-- Young >> old
-- ‘Circinate’ exudate

Type 2
Does the exudate of Type 1 respond to VEGF inhibitors?
Yes and no

Huh? Why ‘yes and no’?
It responds to aflibercept, but not bevacizumab or ranibizumab

Note: This implies that exudation in MacTel 1 and Coats is mediated by PGF, not VEGF!

Type 3

Note: This implies that exudation in MacTel 1 and Coats is mediated by PGF, not VEGF!

In addition to VEGF, aflibercept also inhibits placental growth factor, whereas the other agents don’t. This anti-PGF activity is believed to account for the effectiveness of aflibercept in MacTel Type 1 (as well as in Coats).
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--’Circinate’ exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
aka...‘Juxtafoveal telangiectasia’
--Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations
--Complication: CNVM

**Type 3**
aka...‘MacTel’
--Very, very rare
--Bilateral
--Male = Female
--Occlusion of perifoveal capillaries → progressive VA loss
Type 3 (no aka in the Retina book)

Very, very rare -- Bilateral -- Male = Female -- Occlusion of perifoveal capillaries → progressive VA loss

MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...'Aneurysmal telangiectasia'
-- Unilateral
-- Male >> Female
-- Young >> old
-- 'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
aka...'Juxtafoveal telangiectasia'
-- Most common subtype
-- Bilateral
-- Male = Female
-- Onset 40s - 60s
-- Strong association with DM/HTN
-- DFE: Fovea with...
-- Crystalline retinal deposits
-- Foveal cavitations
-- Complication: CNVM

**Type 3**
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

Type 2
aka...'Juxtafoveal telangiectasia'
--Most common subtype
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations
--Complication: CNVM most vs least

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
aka...'Juxtafoveal telangiectasia'
-- Most common subtype

**Type 3**

MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka…‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--’Circinate’ exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
aka…‘Juxtafoveal telangiectasia’
--Most common subtype
--Most common form of MacTel
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations
--Complication: CNVM

While Type 2 is the most common form of MacTel, is it a common condition overall?

**Type 3**

No, it is quite rare

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

'Unilateral parafoveal telangiectasias in a young male child'

**Type 2**
aka...'Juxtafoveal telangiectasia'
--Most common subtype
--Most common form of MacTel
--Most common form of MacTel

While Type 2 is the most common form of MacTel,
is it a common condition overall?
No, it is quite rare

**Type 3**

-
MacTel

**Pathology common to all cases:**
Clinically apparent telangiectasias in the parafoveal region

---

**Macular Telangiectasia**

...has three subtypes:

---

**Type 1**
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
aka...'Juxtafoveal telangiectasia'
-- Most common subtype
-- uni- v bilateral

**Type 3**
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
*aka…‘Aneurysmal telangiectasia’*
--Unilateral
--Male >> Female
--Young >> old
--‘Circinate’ exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
*aka…‘Juxtafoveal telangiectasia’*
-- Most common subtype
--Bilateral

**Type 3**

MacTel 44

Macular Telangiectasia…has three subtypes:
Type 3

aka...’Retina’

Very, very rare -- Bilateral -- Male = Female -- Occlusion of perifoveal capillaries $\rightarrow$ progressive VA loss

MacTel

Macular Telangiectasia

...has three subtypes:

Type 1
aka...’Aneurysmal’ telangiectasia
-- Unilateral
-- Male >> Female
-- Young >> old
-- ‘Circinate’ exudate

‘Unilateral parafoveal telangiectasias in a young male child’

Type 2
aka...’Juxtafoveal’ telangiectasia
-- Most common subtype
-- Bilateral
-- Male >> Female

Type 3

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
aka...'Juxtafoveal telangiectasia'
--Most common subtype
--Bilateral
--Male = Female

**Type 3**
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...'Aneurysmal' telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

Unilateral parafoveal telangiectasias
in a young male child

Type 2
aka...'Juxtafoveal' telangiectasia'
--Most common subtype
--Bilateral
--Male = Female
--Onset age range

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
*aka...'Aneurysmal* telangiectasia*
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
*aka...'Juxtafoveal* telangiectasia*
-- Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s

**Type 3**
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

Type 2
aka...'Juxtafoveal telangiectasia'
--Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with two systemic conditions

Type 3
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka...‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--’Circinate’ exudate

‘Unilateral parafoveal telangiectasias in a young male child’

Type 2
aka...‘Juxtafoveal telangiectasia’
-- Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN

Type 3

50

50
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka...'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
aka...'Juxtafoveal telangiectasia'
--Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
  -- appearance
  -- Crystalline retinal deposits

**Type 3**
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
aka…”Aneurysmal telangiectasia”
--Unilateral
--Male >> Female
--Young >> old
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**MacTel**

*Pathology common to all cases:* Clinically apparent telangiectasias in the parafoveal region

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  - Crystalline retinal deposits and...

- **Type 3**

In addition to crystalline deposits, the parafoveal region often takes on an appearance characterized by a particular color—what is it?
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

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-- Most common subtype
-- Bilateral
-- Male = Female
-- Onset 40s - 60s
-- Strong association with DM/HTN
-- DFE: Fovea with...
-- Crystalline retinal deposits and...grayish appearance

Type 3

In addition to crystalline deposits, the parafoveal region often takes on an appearance characterized by a particular color—what is it?

Gray
Type II MacTel. Note the gray appearance & crystalline deposits
Type II MacTel: FA. Note that the perifoveal leakage is more prominent temporally—a classic finding in MacTel.
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

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--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal

Type 3
MacTel

Pathology common to all cases:
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  --Crystalline retinal deposits
  --Foveal cavitations

**Type 3**
MacTel

Pathology common to all cases:
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--'Circinate' exudate

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--Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations

Type 3
aka...'MacTel'

What one word is used to describe the shape of the cavitations?
'Oblong'

With respect to the retinal surface, is the long axis of the cavitation oriented parallel, or perpendicular?
Parallel
Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia
…has three subtypes:

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aka ‘Aneurysmal telangiectasia’
--Unilateral
--Male >> Female
--Young >> old
--‘Circinate’ exudate

‘Unilateral parafoveal telangiectasias in a young male child’

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--Strong association with DM/HTN
--DFE: Fovea with…
--Crystalline retinal deposits
--Foveal cavitations

**Type 3**

What one word is used to describe the shape of the cavitations? ‘Oblong’
Unilateral parafoveal telangiectasias in a young male child

**Type 3**

- **Retina** book
- Very, very rare
- Bilateral
- Male = Female
- Occlusion of perifoveal capillaries $\rightarrow$ progressive VA loss

MacTel

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**Pathology common to all cases:**
Clinically apparent *telangiectasias* in the *parafoveal* region

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**Macular Telangiectasia**

...has three subtypes:

**Type 1**

- *Aneurysmal telangiectasia*
  - Unilateral
  - Male >> Female
  - Young >> old
  - 'Circinate' exudate

**Type 2**

- *Juxtafoveal telangiectasia*
  - Most common subtype
  - Bilateral
  - Male = Female
  - Onset 40s - 60s
  - Strong association with DM/HTN
  - DFE: Fovea with...
  - Crystalline retinal deposits
  - Foveal cavitations
  - Complication: CNVM

**Type 3**

- *Unilateral parafoveal telangiectasias in a young male child*

---

What one word is used to describe the shape of the cavitations? ‘Oblong’

With respect to the retinal surface, is the long axis of the cavitation oriented parallel, or perpendicular? Parallel
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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--Young >> old
--’Circinate’ exudate

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--Most common subtype
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--Crystalline retinal deposits
--Foveal cavitations

Type 3
--Crystalline retinal deposits
--Foveal cavitations

What one word is used to describe the shape of the cavitations?
‘Oblong’

With respect to the retinal surface, is the long axis of the cavitation oriented parallel, or perpendicular?
Parallel

What one word is used to describe the shape of the cavitations?
‘Oblong’

With respect to the retinal surface, is the long axis of the cavitation oriented parallel, or perpendicular?
Parallel

With respect to the retinal surface, is the long axis of the cavitation oriented parallel, or perpendicular?
Parallel
Type II MacTel: Oblong cavitations
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

Type 1
aka…'Aneurysmal telangiectasia'
--Unilateral
--Male >> Female
--Young >> old
--'Circinate’ exudate

‘Unilateral parafoveal telangiectasias in a young male child’

Type 2
aka…'Juxtafoveal telangiectasia’
-- Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with…
--Crystalline retinal deposits
--Foveal cavitations
--Complication: two words

Type 3

MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations
--Complication: Subretinal neo

Type 3
MacTel

Pathology common to all cases: Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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--DFE: Fovea with…
   --Crystalline retinal deposits
   --Foveal cavitations
--Complication: Subretinal neo

Type 3

‘Bilateral parafoveal telangiectasias’ in an adult

Type 2 MacTel TLDR
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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--Unilateral
--Male >> Female
--Young >> old
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Unilateral parafoveal telangiectasias in a young male child

Type 2
aka...'Juxtafoveal' telangiectasia'
--Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations
--Complication: Subretinal neo

Bilateral parafoveal telangiectasias in an adult

Type 3
(no aka in the Retina book)

Very, very rare
--Bilateral
--Male = Female
--Occlusion of perifoveal capillaries -> progressive VA loss
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

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--Male >> Female
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--'Circinate' exudate

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   --Crystalline retinal deposits
   --Foveal cavitations
--Complication: Subretinal neo

‘Bilateral parafoveal telangiectasias’ in an adult

Type 3
(no aka in the Retina book)
--Very, very rare

‘Bilateral parafoveal telangiectasias’ in an adult
MacTel

Pathology common to all cases: Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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--Male >> Female
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‘Unilateral parafoveal telangiectasias in a young male child’

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-- Most common subtype
--Bilateral
--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with…
--Crystalline retinal deposits
--Foveal cavitations
--Complication: Subretinal neo

‘Bilateral parafoveal telangiectasias’ in an adult

**Type 3**
(no aka in the Retina book)
--Very, very rare

‘Very, very rare parafoveal telangiectasias’
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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--Unilateral
--Male >> Female
--Young >> old
--'Circinate' exudate

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--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
  --Crystalline retinal deposits
  --Foveal cavitations
--Complication: Subretinal neo

‘Bilateral parafoveal telangiectasias’ in an adult

**Type 3**
(no aka in the Retina book)
--Very, very rare
- uni- v bilateral
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations
--Complication: Subretinal neo

'Bilateral parafoveal telangiectasias' in an adult

Type 3
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--Very, very rare
--Bilateral
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

...has three subtypes:

**Type 1**
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-- Male >> Female
-- Young >> old
-- "Circinate" exudate

'Unilateral parafoveal telangiectasias in a young male child'

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  -- Crystalline retinal deposits
  -- Foveal cavitations
-- Complication: Subretinal neo

'Bilateral parafoveal telangiectasias' in an adult

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-- Bilateral
-- Male >> Female

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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  -- Crystalline retinal deposits
  -- Foveal cavitations
-- Complication: Subretinal neo

'Bilateral parafoveal telangiectasias' in an adult

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(no aka in the Retina book)
-- Very, very rare
-- Bilateral
-- Male >> Female
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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'**Unilateral**
parafoveal telangiectasias
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  --Crystalline retinal deposits
  --Foveal cavitations
--Complication: Subretinal neo

'**Bilateral**
parafoveal telangiectasias'
in an adult'

**Type 3**
(no aka in the Retina book)
--Very, very rare
--Bilateral
--Male = Female

'**Unilateral**
parafoveal telangiectasias in a young male child'
MacTel

Pathology common to all cases:
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--Strong association with DM/HTN
--DFE: Fovea with...
  --Crystalline retinal deposits
  --Foveal cavitations
--Complication: Subretinal neo

'Bilateral parafoveal telangiectasias in an adult'

**Type 3**
(no aka in the Retina book)
--Very, very rare
--Bilateral
--Male = Female
--Occlusion of perifoveal capillaries → progressive VA loss
MacTel

Type III MacTel: Parafoveal occlusive vasculopathy
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

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‘Unilateral parafoveal telangiectasias in a young male child’

**Type 2**
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-- Most common subtype
--Bilateral
--Male = Female
--DFE: Fovea with...
--Crystalline retinal deposits
--Foveal cavitations
--Complication: Subretinal neo

‘Bilateral parafoveal telangiectasias’ in an adult

**Type 3**
aka...'in the Retina book'
--Very, very rare
--Bilateral
--Male = Female
--Occlusion of perifoveal capillaries → progressive VA loss

Protip: Other than knowing it exists, don’t devote any effort to studying Type 3 (the Retina book gives it literally one sentence).
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Macular Telangiectasia

Instead, focus on learning about Types 1 & 2!

**Type 1**
*aaka...’Aneurysmal’ telangiectasia*
--Unilateral
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--Young >> old
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‘Unilateral parafoveal telangiectasias in a young male child’

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*aaka...’Juxtafoveal’ telangiectasia*
-- Most common subtype
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--Male = Female
--Onset 40s - 60s
--Strong association with DM/HTN
--DFE: Fovea with...
  --Crystalline retinal deposits
  --Foveal cavitations
--Complication: Subretinal neo

‘Bilateral parafoveal telangiectasias’ in an adult

**Type 3**
Protip: Other than knowing it exists, don’t devote any effort to studying Type 3 (the Retina book gives it literally one sentence).

‘Bilateral parafoveal telangiectasias’ w/ retinal capillary obliteration

Instead, focus on learning about Types 1 & 2!
MacTel

Pathology common to all cases:
Clinically apparent telangiectasias in the parafoveal region

Instead, focus on learning about Types 1 & 2!

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aka…'Aneurysmal telangiectasia'
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‘Unilateral parafoveal telangiectasias in a young male child’

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--Male = Female
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   --Crystalline retinal deposits
   --Foveal cavitations
--Complication: Subretinal neo

‘Bilateral parafoveal telangiectasias’ in an adult

**Type 3**
(no aka in the Retina book)
--Very, very rare
--Bilateral
--Male = Female
--Occlusion of perifoveal capillaries → progressive VA loss

‘Bilateral parafoveal telangiectasias w/ retinal capillary obliteration’

Protip: Other than knowing it exists, don’t devote any effort to studying Type 3 (the Retina book gives it literally one sentence).