

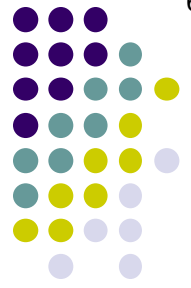
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings:

Number of answers

-
-
-
-
-
-
-
-
-



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**

Number of answers

-
-
-
-
-
-
-
-
-



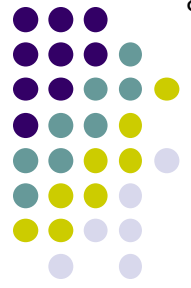
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**
 - (2) ● Increased risk of pheo, renal malignancies:

Number of answers

-
-
-
-
-
-
-
-
-



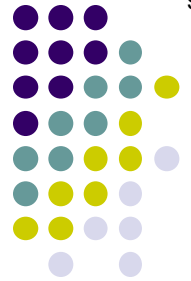
A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**
 - (2) ● Increased risk of pheo, renal malignancies: **NF1, vH-L**

Number of answers

-
-
-
-
-
-
-
-
-



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**
 - (2) ● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1) ● Associated with thymus hypoplasia → T-cell immune system abnormalities:

Number of answers

-
-
-
-
-
-
-
-



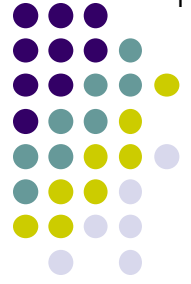
A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**
 - (2) ● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1) ● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**

Number of answers

-
-
-
-
-
-
-
-



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**
 - (2) ● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1) ● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1) ● Manifests in females *almost* exclusively:

Number of answers

-
-
-
-
-
-
-



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**

Number of answers





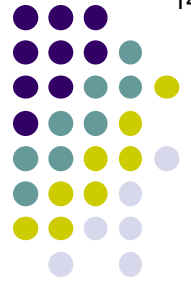
Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**
 - (2) ● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1) ● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1) ● Manifests in females *almost* exclusively: **IP**
 - (2) ● Associated with Lisch nodules:

Number of answers

-
-
-
-
-
-



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**
 - (2) ● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1) ● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1) ● Manifests in females *almost* exclusively: **IP**
 - (2) ● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)

Number of answers





Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1) ● Comes in a *central* and *peripheral* variety: **NF**
 - (2) ● May present with ataxia **AT, NF2**
 - (1) ● Only syndrome without skin findings: **vH-L**
 - (2) ● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1) ● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1) ● Manifests in females *almost* exclusively: **IP**
 - (2) ● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2) ● Associated with port-wine stain:
 -
 -
 -
 -
 -

Number of answers

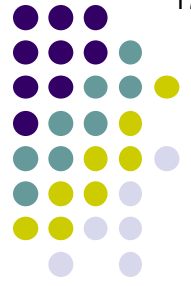


A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 -
 -
 -
 -
 -

Number of answers



Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*:
 -
 -
 -
 -

Number of answers

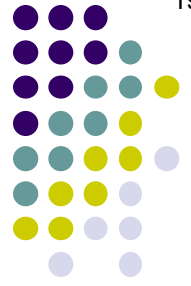


A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 -
 -
 -
 -

Number of answers

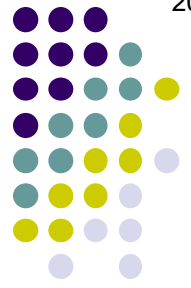


Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 - (1)● Classic skin lesion description is ‘splashed paint:’
 -
 -
 -

Number of answers



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Number of answers

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 - (1)● Classic skin lesion description is ‘splashed paint:’ **IP**
 -
 -
 -

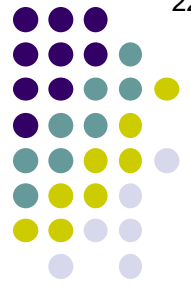


TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 - (1)● Classic skin lesion description is ‘splashed paint:’ **IP**
 - (1)● Complain of decreased hearing and/or tinnitus:
 -
 -

Number of answers

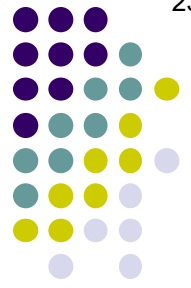


A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 - (1)● Classic skin lesion description is ‘splashed paint:’ **IP**
 - (1)● Complain of decreased hearing and/or tinnitus: **NF2**
 -
 -

Number of answers

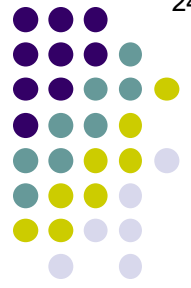


Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 - (1)● Classic skin lesion description is ‘splashed paint:’ **IP**
 - (1)● Complain of decreased hearing and/or tinnitus: **NF2**
 - (2)● Strongly associated with seizures:
 -

Number of answers



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 - (1)● Classic skin lesion description is ‘splashed paint:’ **IP**
 - (1)● Complain of decreased hearing and/or tinnitus: **NF2**
 - (2)● Strongly associated with seizures: **TS, SWS**
 -

Number of answers

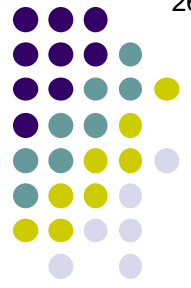


Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 - (1)● Classic skin lesion description is 'splashed paint': **IP**
 - (1)● Complain of decreased hearing and/or tinnitus: **NF2**
 - (2)● Strongly associated with seizures: **TS, SWS**
 - (2)● Diagnostic criteria includes family history:

Number of answers

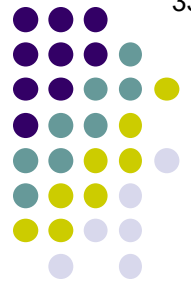


A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- *For each statement, identify the associated phakomatosis(es)*
 - (1)● Comes in a *central* and *peripheral* variety: **NF**
 - (2)● May present with ataxia **AT, NF2**
 - (1)● Only syndrome without skin findings: **vH-L**
 - (2)● Increased risk of pheo, renal malignancies: **NF1, vH-L**
 - (1)● Associated with thymus hypoplasia → T-cell immune system abnormalities: **AT**
 - (1)● Manifests in females *almost* exclusively: **IP**
 - (2)● Associated with Lisch nodules: **NF1, NF2** (uncommon; not expected)
 - (2)● Associated with port-wine stain: **SWS, KTS**
 - (2)● Sporadic inheritance *only*: **SWS, RA**
 - (1)● Classic skin lesion description is ‘splashed paint:’ **IP**
 - (1)● Complain of decreased hearing and/or tinnitus: **NF2**
 - (2)● Strongly associated with seizures: **TS, SWS**
 - (2)● Diagnostic criteria includes family history: **NF1, NF2**

Number of answers



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

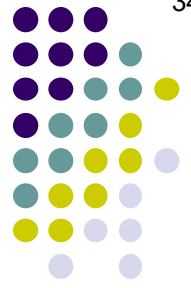
Q

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with **intracranial AVM**: **SWS, RA**

Number of answers

-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-

How do the intracranial AVM differ in SWS vs RA?
--
--



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with **intracranial AVM**: **SWS, RA**

Number of answers

-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-

How do the intracranial AVM differ in SWS vs RA?
--AVM are in SWS but in RA
--



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with **intracranial AVM**: **SWS, RA**

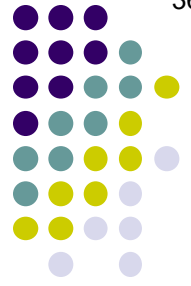
Number of answers



How do the intracranial AVM differ in SWS vs RA?

--AVM are **meningeal** in SWS but **parenchymal** in RA

--



Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with **intracranial AVM**: **SWS, RA**

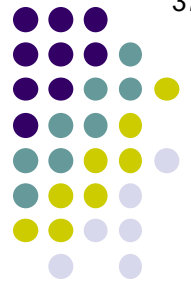
How do the intracranial AVM differ in SWS vs RA?

--AVM are **meningeal** in SWS but **parenchymal** in RA

--They are prone to bleeding in **one**, but not in **other**

Number of answers





TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

A

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with **intracranial AVM**: **SWS, RA**

Number of answers

-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-

How do the intracranial AVM differ in SWS vs RA?
--AVM are **meningeal** in SWS but **parenchymal** in RA
--They are prone to bleeding in **RA** , but not in **SWS**

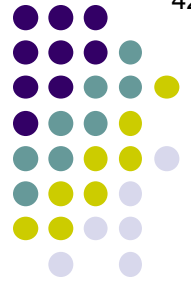
**Q**

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with intracranial AVM: **SWS, RA**
- (1) ● Retinal lesion is an astrocytic hamartoma:

Number of answers





TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● **Only ones without a retinal lesion: SWS, KTS**

Number of answers

-
-
-
-
-
-
-
-
-
-
-

*Wait a minute--what about the hemangioma in SWS?
The hemangioma is a choroidal, not retinal lesion*



A

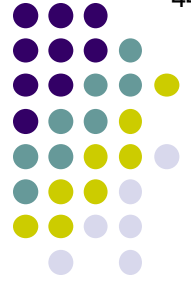
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● **Only ones without a retinal lesion: SWS, KTS**

Number of answers



*Wait a minute--what about the hemangioma in SWS?
 The hemangioma is a *choroidal*, not retinal lesion*



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● **Only ones without a retinal lesion: SWS, KTS**

Number of answers

-
-
-
-
-
-
-
-
-
-
-

Wait a minute--what about the hemangioma in ^{KTS}~~SWS~~?
The hemangioma is a *choroidal*, not retinal lesion

Is choroidal hemangioma a feature of KTS?



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● **Only ones without a retinal lesion: SWS, KTS**

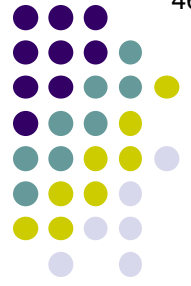
Number of answers



Wait a minute--what about the hemangioma in ^{KTS}~~SWS~~?
 The hemangioma is a *choroidal*, not retinal lesion

Is choroidal hemangioma a feature of KTS?

No, and this (along with limb hypertrophy) is one of the key points of differentiation between them



Q

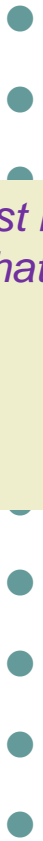
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

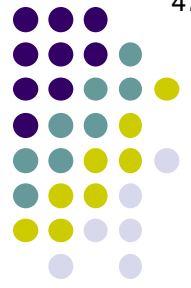
- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● **Only ones without a retinal lesion: SWS, KTS**

Number of answers

*Wait a minute--what about the hemangioma in SWS?
 The hemangioma is a choroidal, not retinal lesion*

*Just because SWS pts don't have a retinal lesion doesn't mean they don't have retinal issues.
 What significant retinal problem can arise secondary to the diffuse choroidal hemangioma?*





TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

A

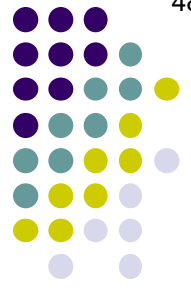
- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● **Only ones without a retinal lesion: SWS, KTS**

Number of answers

*Wait a minute--what about the hemangioma in SWS?
The hemangioma is a choroidal, not retinal lesion*

*Just because SWS pts don't have a retinal lesion doesn't mean they don't have retinal issues.
What significant retinal problem can arise secondary to the diffuse choroidal hemangioma?
Exudative RD*

-
-
-
-



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● **Only ones without a retinal lesion: SWS, KTS**

Number of answers

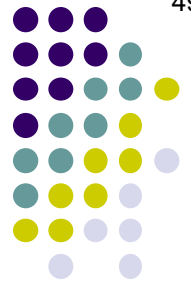
*Wait a minute--what about the hemangioma in SWS?
The hemangioma is a choroidal, not retinal lesion*

*Just because SWS pts don't have a retinal lesion doesn't mean they don't have retinal issues.
What significant retinal problem can arise secondary to the diffuse choroidal hemangioma?*

Exudative RD

How common is exudative RD in Sturge-Weber?

-
-
-
-



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

A

- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● **Only ones without a retinal lesion: SWS, KTS**

Number of answers

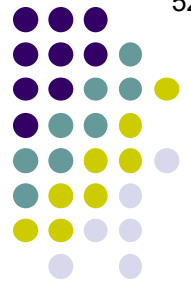
*Wait a minute--what about the hemangioma in SWS?
The hemangioma is a choroidal, not retinal lesion*

*Just because SWS pts don't have a retinal lesion doesn't mean they don't have retinal issues.
What significant retinal problem can arise secondary to the diffuse choroidal hemangioma?*

Exudative RD

*How common is exudative RD in Sturge-Weber?
About 50% of patients with a diffuse choroidal hemangioma will develop one*

-
-
-
-



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with intracranial AVM: **SWS, RA**
- (1) ● Retinal lesion is an astrocytic hamartoma: **TS**
- (2) ● Only ones without a retinal lesion: **SWS, KTS**
- (4) ● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4) ● Associated with glaucoma:

Number of answers

-
-
-
-
-
-
-
-
-



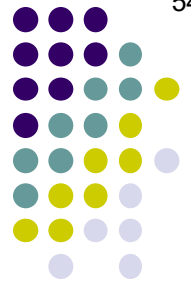
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

A

Number of answers

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with intracranial AVM: **SWS, RA**
- (1) ● Retinal lesion is an astrocytic hamartoma: **TS**
- (2) ● Only ones without a retinal lesion: **SWS, KTS**
- (4) ● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4) ● Associated with glaucoma: **SWS, NF1, RA, KTS**

-
-
-
-
-
-
-
-
-



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● Only ones without a retinal lesion: SWS, KTS
- (4) ● Associated with intracranial tumors: NF2, NF1, TS, vH-L
- (4) ● **Associated with glaucoma: SWS, NF1, RA, KTS**

Number of answers

-
-
-
-
-
-
-
-
-
-

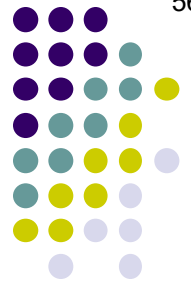
What is the glaucoma mechanism for each of these?

--SWS:

--NF1:

--RA:

--KTS:



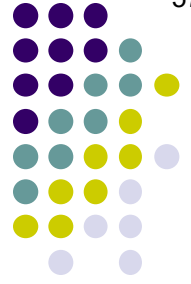
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

Number of answers

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with intracranial AVM: **SWS, RA**
- (1) ● Retinal lesion is an astrocytic hamartoma: **TS**
- (2) ● Only ones without a retinal lesion: **SWS, KTS**
- (4) ● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4) ● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1) ● Retinal findings look like ROP:

-
-
-
-
-
-
-
-



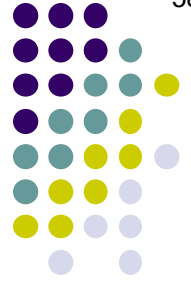
A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

Number of answers

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with intracranial AVM: **SWS, RA**
- (1) ● Retinal lesion is an astrocytic hamartoma: **TS**
- (2) ● Only ones without a retinal lesion: **SWS, KTS**
- (4) ● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4) ● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1) ● Retinal findings look like ROP: **IP**





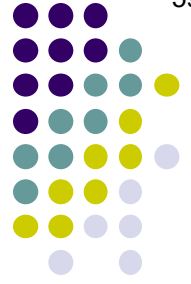
Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

Number of answers

- (1) ● Presents with hypertrophy of a single limb: **KTS**
- (2) ● Associated with intracranial AVM: **SWS, RA**
- (1) ● Retinal lesion is an astrocytic hamartoma: **TS**
- (2) ● Only ones without a retinal lesion: **SWS, KTS**
- (4) ● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4) ● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1) ● Retinal findings look like ROP: **IP**
- (2) ● Lid involvement → increased risk of glaucoma:

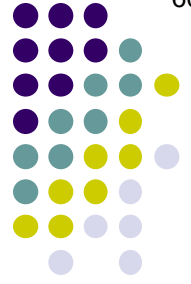




A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- Number of answers
- (1) ● Presents with hypertrophy of a single limb: **KTS**
 - (2) ● Associated with intracranial AVM: **SWS, RA**
 - (1) ● Retinal lesion is an astrocytic hamartoma: **TS**
 - (2) ● Only ones without a retinal lesion: **SWS, KTS**
 - (4) ● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
 - (4) ● Associated with glaucoma: **SWS, NF1, RA, KTS**
 - (1) ● Retinal findings look like ROP: **IP**
 - (2) ● Lid involvement → increased risk of glaucoma: **NF1, SWS**
 -
 -
 -
 -
 -
 -
 -



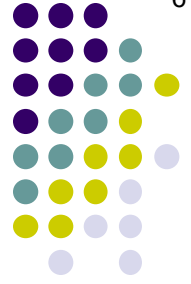
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

Number of answers

- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding:

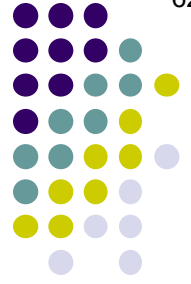




A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- Number of answers
- (1) ● Presents with hypertrophy of a single limb: **KTS**
 - (2) ● Associated with intracranial AVM: **SWS, RA**
 - (1) ● Retinal lesion is an astrocytic hamartoma: **TS**
 - (2) ● Only ones without a retinal lesion: **SWS, KTS**
 - (4) ● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
 - (4) ● Associated with glaucoma: **SWS, NF1, RA, KTS**
 - (1) ● Retinal findings look like ROP: **IP**
 - (2) ● Lid involvement → increased risk of glaucoma: **NF1, SWS**
 - (2) ● Has a classic conjunctival finding: **AT, SWS**
 -
 -
 -
 -
 -
 -



Q

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

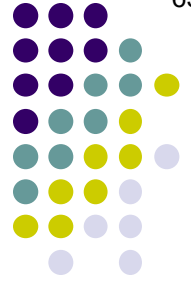
Number of answers

- (1) ● Presents with hypertrophy of a single limb: KTS
- (2) ● Associated with intracranial AVM: SWS, RA
- (1) ● Retinal lesion is an astrocytic hamartoma: TS
- (2) ● Only ones without a retinal lesion: SWS, KTS
- (4) ● Associated with intracranial tumors: NF2, NF1, TS, vH-L
- (4) ● Associated with glaucoma: SWS, NF1, RA, KTS
- (1) ● Retinal findings look like ROP: IP
- (2) ● Lid involvement → increased risk of glaucoma: NF1, SWS
- (2) ● **Has a classic conjunctival finding: AT, SWS**

What is the conj finding in:

--AT?

--SWS?



A

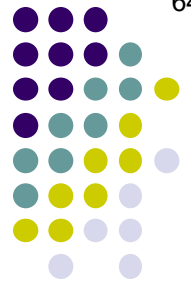
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- Number of answers
- (1) ● Presents with hypertrophy of a single limb: KTS
 - (2) ● Associated with intracranial AVM: SWS, RA
 - (1) ● Retinal lesion is an astrocytic hamartoma: TS
 - (2) ● Only ones without a retinal lesion: SWS, KTS
 - (4) ● Associated with intracranial tumors: NF2, NF1, TS, vH-L
 - (4) ● Associated with glaucoma: SWS, NF1, RA, KTS
 - (1) ● Retinal findings look like ROP: IP
 - (2) ● Lid involvement → increased risk of glaucoma: NF1, SWS
 - (2) ● **Has a classic conjunctival finding: AT, SWS**

What is the conj finding in:

--AT? **Telangiectasias**

--SWS? Increased vascularity → **'pink eye' appearance**



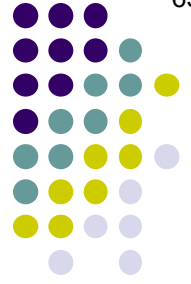
TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

Q

Number of answers

- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding: **AT, SWS**
- (1)● ‘Classic triad’ mnemonic is *epiloia*:

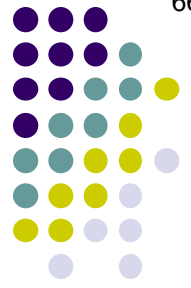
-
-
-
-
-



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- Number of answers
- (1)● Presents with hypertrophy of a single limb: **KTS**
 - (2)● Associated with intracranial AVM: **SWS, RA**
 - (1)● Retinal lesion is an astrocytic hamartoma: **TS**
 - (2)● Only ones without a retinal lesion: **SWS, KTS**
 - (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
 - (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
 - (1)● Retinal findings look like ROP: **IP**
 - (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
 - (2)● Has a classic conjunctival finding: **AT, SWS**
 - (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
 -
 -
 -
 -
 -



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

Number of answers

- (1)● Presents with hypertrophy of a single limb: KTS
- (2)● Associated with intracranial AVM: SWS, RA
- (1)● Retinal lesion is an astrocytic hamartoma: TS
- (2)● Only ones without a retinal lesion: SWS, KTS
- (4)● Associated with intracranial tumors: NF2, NF1, TS, vH-L
- (4)● Associated with glaucoma: SWS, NF1, RA, KTS
- (1)● Retinal findings look like ROP: IP
- (2)● Lid involvement → increased risk of glaucoma: NF1, SWS
- (2)● Has a classic conjunctival finding: AT, SWS
- (1)● **‘Classic triad’ mnemonic is *epiloia*: TS**

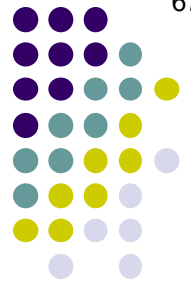
-
-
-
-
-

What does epiloia stand for?

--

--

--



Q/A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Number of answers

- (1)● Presents with hypertrophy of a single limb: KTS
- (2)● Associated with intracranial AVM: SWS, RA
- (1)● Retinal lesion is an astrocytic hamartoma: TS
- (2)● Only ones without a retinal lesion: SWS, KTS
- (4)● Associated with intracranial tumors: NF2, NF1, TS, vH-L
- (4)● Associated with glaucoma: SWS, NF1, RA, KTS
- (1)● Retinal findings look like ROP: IP
- (2)● Lid involvement → increased risk of glaucoma: NF1, SWS
- (2)● Has a classic conjunctival finding: AT, SWS
- (1)● **‘Classic triad’ mnemonic is *epiloia*: TS**

-
-
-
-
-

What does *epiloia* stand for?

- Epi
- Lo i
- A



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

A

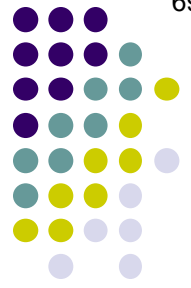
Number of answers

- (1)● Presents with hypertrophy of a single limb: KTS
- (2)● Associated with intracranial AVM: SWS, RA
- (1)● Retinal lesion is an astrocytic hamartoma: TS
- (2)● Only ones without a retinal lesion: SWS, KTS
- (4)● Associated with intracranial tumors: NF2, NF1, TS, vH-L
- (4)● Associated with glaucoma: SWS, NF1, RA, KTS
- (1)● Retinal findings look like ROP: IP
- (2)● Lid involvement → increased risk of glaucoma: NF1, SWS
- (2)● Has a classic conjunctival finding: AT, SWS
- (1)● **‘Classic triad’ mnemonic is *epiloia*: TS**

*What does **epiloia** stand for?*

- E**pilepsy
- L**ow intelligence
- A**ngiomas

-
-
-
-
-



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

Q

Number of answers

- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding: **AT, SWS**
- (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
- (1)● Many breast Ca patients are heterozygotes for this:
 -
 -
 -
 -



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

- Number of answers
- (1)● Presents with hypertrophy of a single limb: **KTS**
 - (2)● Associated with intracranial AVM: **SWS, RA**
 - (1)● Retinal lesion is an astrocytic hamartoma: **TS**
 - (2)● Only ones without a retinal lesion: **SWS, KTS**
 - (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
 - (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
 - (1)● Retinal findings look like ROP: **IP**
 - (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
 - (2)● Has a classic conjunctival finding: **AT, SWS**
 - (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
 - (1)● Many breast Ca patients are heterozygotes for this: **AT**
 -
 -
 -
 -

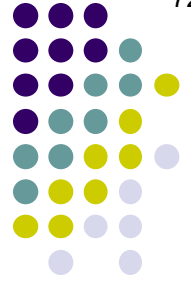


TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

Number of answers

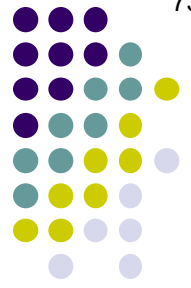
- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding: **AT, SWS**
- (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
- (1)● Many breast Ca patients are heterozygotes for this: **AT**
- (1)● Associated with cerebellar tumor:
 -
 -
 -



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- Number of answers
- (1)● Presents with hypertrophy of a single limb: **KTS**
 - (2)● Associated with intracranial AVM: **SWS, RA**
 - (1)● Retinal lesion is an astrocytic hamartoma: **TS**
 - (2)● Only ones without a retinal lesion: **SWS, KTS**
 - (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
 - (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
 - (1)● Retinal findings look like ROP: **IP**
 - (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
 - (2)● Has a classic conjunctival finding: **AT, SWS**
 - (1)● 'Classic triad' mnemonic is *epiloia*: **TS**
 - (1)● Many breast Ca patients are heterozygotes for this: **AT**
 - (1)● Associated with cerebellar tumor: **vH-L**
 -
 -
 -

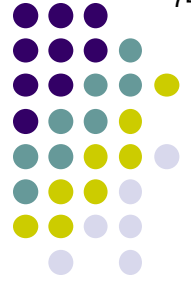


TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

Number of answers

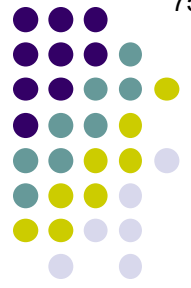
- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding: **AT, SWS**
- (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
- (1)● Many breast Ca patients are heterozygotes for this: **AT**
- (1)● Associated with cerebellar tumor: **vH-L**
- (1)● Retinal lesions can be ‘smooth’ or ‘tapioca/mulberry’:
-
-



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

- Number of answers
- (1)● Presents with hypertrophy of a single limb: **KTS**
 - (2)● Associated with intracranial AVM: **SWS, RA**
 - (1)● Retinal lesion is an astrocytic hamartoma: **TS**
 - (2)● Only ones without a retinal lesion: **SWS, KTS**
 - (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
 - (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
 - (1)● Retinal findings look like ROP: **IP**
 - (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
 - (2)● Has a classic conjunctival finding: **AT, SWS**
 - (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
 - (1)● Many breast Ca patients are heterozygotes for this: **AT**
 - (1)● Associated with cerebellar tumor: **vH-L**
 - (1)● Retinal lesions can be ‘smooth’ or ‘tapioca/mulberry’: **TS**
 -
 -



TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

Number of answers

- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding: **AT, SWS**
- (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
- (1)● Many breast Ca patients are heterozygotes for this: **AT**
- (1)● Associated with cerebellar tumor: **vH-L**
- (1)● Retinal lesions can be ‘smooth’ or ‘tapioca/mulberry’: **TS**
- (1)● Classic eye finding is cortical cats or PSC:





A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS:** Klippel-Trénaunay syndrome

Number of answers

- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding: **AT, SWS**
- (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
- (1)● Many breast Ca patients are heterozygotes for this: **AT**
- (1)● Associated with cerebellar tumor: **vH-L**
- (1)● Retinal lesions can be ‘smooth’ or ‘tapioca/mulberry’: **TS**
- (1)● Classic eye finding is cortical cats or PSC: **NF2**



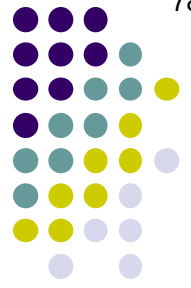


TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Q

Number of answers

- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding: **AT, SWS**
- (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
- (1)● Many breast Ca patients are heterozygotes for this: **AT**
- (1)● Associated with cerebellar tumor: **vH-L**
- (1)● Retinal lesions can be ‘smooth’ or ‘tapioca/mulberry’: **TS**
- (1)● Classic eye finding is cortical cats or PSC: **NF2**
- (2)● The eye findings are unilateral:



A

TS: Tuberous sclerosis **SWS:** Sturge-Weber syndrome **vH-L:** von Hippel-Lindau
IP: Incontinentia pigmenti **NF:** Neurofibromatosis **RA:** Racemose angioma
AT: Ataxia-telangiectasia **KTS** Klippel-Trénaunay syndrome

Number of answers

- (1)● Presents with hypertrophy of a single limb: **KTS**
- (2)● Associated with intracranial AVM: **SWS, RA**
- (1)● Retinal lesion is an astrocytic hamartoma: **TS**
- (2)● Only ones without a retinal lesion: **SWS, KTS**
- (4)● Associated with intracranial tumors: **NF2, NF1, TS, vH-L**
- (4)● Associated with glaucoma: **SWS, NF1, RA, KTS**
- (1)● Retinal findings look like ROP: **IP**
- (2)● Lid involvement → increased risk of glaucoma: **NF1, SWS**
- (2)● Has a classic conjunctival finding: **AT, SWS**
- (1)● ‘Classic triad’ mnemonic is *epiloia*: **TS**
- (1)● Many breast Ca patients are heterozygotes for this: **AT**
- (1)● Associated with cerebellar tumor: **vH-L**
- (1)● Retinal lesions can be ‘smooth’ or ‘tapioca/mulberry’: **TS**
- (1)● Classic eye finding is cortical cats or PSC: **NF2**
- (2)● The eye findings are unilateral: **RA, SWS**