Specifics of invasive therapy in a pediatric age group

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Disclosure

Speaker name:
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I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

X I do not have any potential conflict of interest
Goals of AVMs surgical treatment

- **Cure**
  - To cure the patient
  - Alleviating symptoms
  - Preserving vital functions
  - Improving deformity

- **Control**
  - To control the malformation

- **Manage**
  - Alleviating symptoms
  - Preserving vital functions
  - Improving deformity
Worst Case
Worst Case
Worst Case – 11 years later
Interdisciplinarity

Markers of AVM evolution

- Accurate diagnosis
- Endovascular management

Differential diagnosis

• Avoiding coagulopathy
• Reducing blood requirements
Factors to consider

- Diagnosis
- Size
- Age
- Schobinger stage
- Anatomical location
- Mutation
Diagnosis
Diagnosis
Diagnosis
Innerhalb der genannten Formation gelingt kein sicherer gefäßassoziierter dopplersonographischer Flussnachweis. Bild insgesamt/spw. vereinbar mit einer low-flow AVM.

Befund und Beurteilung:
Es liegen MRT Voraufnahmen vom selben Tag zum Vergleich vor.
Parkes Weber Syndrome
Schobinger Stage

Schobinger Classification

I Quiescent
II Expansion
III Destruction
IV Decompensation
Stage I AVM: Preventive surgical treatment

- In a non-anatomically important location (ie, trunk, proximal extremity)
- Small, well-localized AVM in a difficult location (ie, face, hand)

May be removed for possible “cure” before it expands and complete extirpation is no longer possible
Stage I AVM: Preventive surgical treatment
Stage I AVM: Preventive surgical treatment
No cardiac failure and signs of recurrence
Stage I AVM: Preventive surgical treatment
Stage I AVM: Preventive surgical treatment
Stage I AVM

Large, asymptomatic AVM’s located in an anatomically sensitive area, such as the face, are best observed, especially in a young child not psychologically prepared for a major procedure and significant sequellae.
Some patients (20%) do not experience significant long-term morbidity from their AVM until they are adults.
Stage III AVM
Stage III AVM
Stage II AVM – case report
Stage II AVM – case report

Before 1. Embolisation

Before 2. Embolisation
Stage II AVM – case report
Stage II AVM – case report

2. Sklero direct puncture
Stage II AVM – case report
Stage II AVM – case report
Conclusions

• Solid knowledge of AVM evolution
• Accurate multidisciplinary evaluation
• Carefully evaluated strategy
• Modesty
• Lifelong commitment with the patient
Thank you for your attention
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