Glomus-type AVM

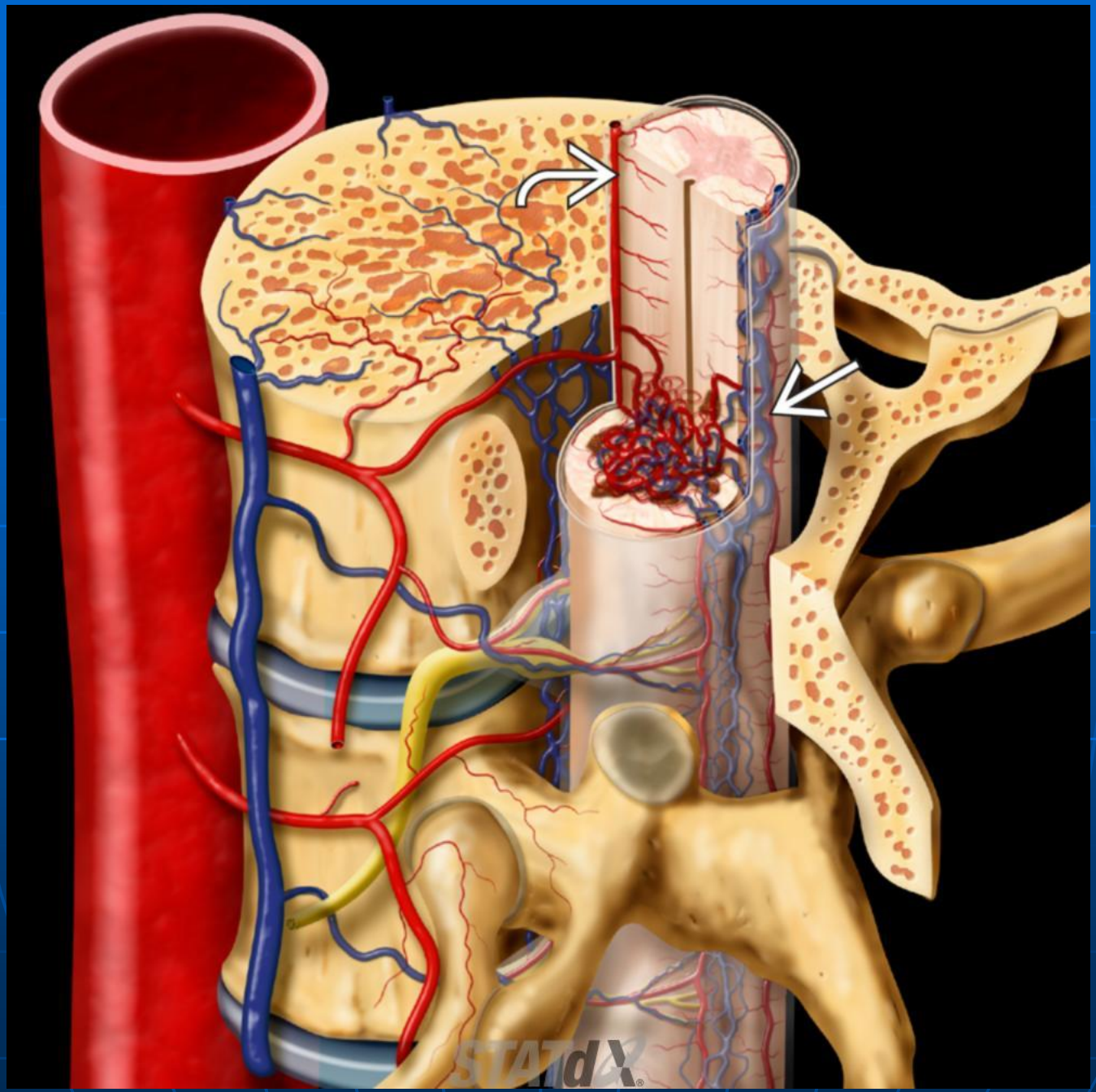
- Type 2 Arteriovenous Malformation
- Multiple, well-defined serpentine flow voids within substance of cord
- Large cord, heterogeneous signal (blood products), flow voids
- Dynamic enhanced MRA capable of defining enlarged feeding arteries, nidus, and enlarged draining veins
- Supplied by anterior spinal artery &/or posterior spinal artery
  - Nidus drains to coronal venous plexus (on cord surface), which drains anterograde to extradural space

Spinal arteriovenous malformations

- Associated with cutaneous angiomas, Klippel-Trenaunay-Weber, Rendu-Osler-Weber syndromes
- Neurologic deterioration with subarachnoid hemorrhage (SAH), ischemia from vascular steal, cord compression, venous hypertension
- SAH most common symptom; pain, myelopathy
- Surgical resection + preop embolization (aneurysms, nidus)
- Definition of intramedullary involvement is critical for classification, prognosis, treatment options

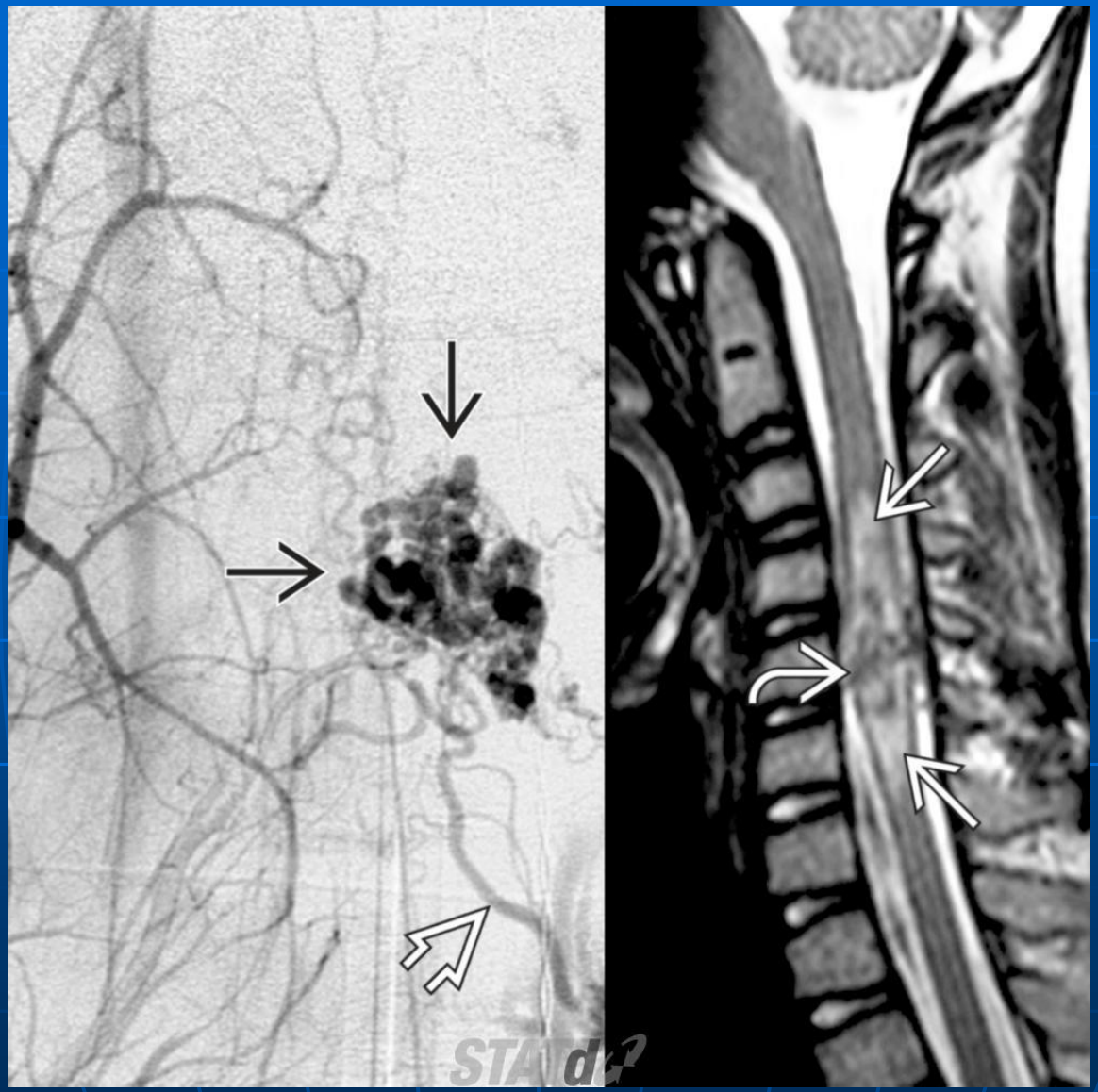
Types

- Type 1: Flow voids on cord surface with cord T2 hyperintensity
- Type 2: Intramedullary nidus (may extend to dorsal subpial surface)
- Type 3: Nidus may have extramedullary and extraspinal extensions
- Type 4: Ventral fistula on cord surface (venous varices displace or distort cord)



Sagittal oblique graphic of the thoracic cord shows focal, compact intramedullary nidus of type 2 arteriovenous malformation (AVM) (white solid arrow) fed by branches from the anterior spinal artery (white curved arrow).

Intramedullary arteriovenous malformation



Anteroposterior DSA (left) demonstrates the compact AVM nidus (black solid arrow) involving the cervical cord. The draining vein is seen extending inferiorly to the cervical epidural plexus (white open arrow). Sagittal T2WI MR (right) shows mild cord expansion with heterogeneous intramedullary T2 signal due to blood products (white curved arrow) and edema (white solid arrow).