Venous anatomy in the cavernous sinus region (Illustration of the cavernous sinus with its tributaries and draining veins, lateral view).
The most important tributaries are the superior ophthalmic vein, the Sylvian vein and the sphenoparietal sinus. The uncal vein is often neglected, however in many arteriograms visible (ca. 2/3 of the cases). For venous drainage of the cavernous sinus, the inferior petrosal sinus and pterygoid plexus have main importance. In principle, both tributaries as well as draining veins may serve as transvenous approach to the cavernous sinus, depending on individual angioarchitecture of the AV fistula.

Tributaries
1 Superior ophthalmic vein (SOV)
2 Inferior ophthalmic vein (IOV)
3 Superficial middle cerebral vein (SMCV, Sylvian vein)
4 Uncal vein (UV)
5 Sphenoparietal sinus (SPPS)
6 Meningeal veins

Drainage
7 Venous plexus of the foramen ovale
8 Vein of the foramen rotundum
9 Pterygoid plexus (PP)
10 Basilar plexus (BP)
11 Superior petrosal sinus (SPS)
12 Inferior petrosal sinus (IPS)
13 Intercavernous sinus (ICS)
14 Jugular bulb (JB)
15 Internal jugular vein (IJV)
16 Cavernous sinus (CS)
17 Sigmoid sinus (SS)
18 Facial vein
19 Temporal vein
20 Angular vein