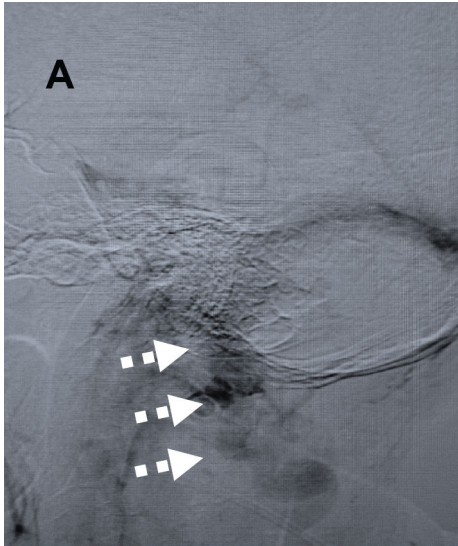


A New Draining or Emissary Vein Originating from Terminal Segment of Sigmoid Venous Sinus?

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A. A lateral projection of cerebral angiogram demonstrating the new vein in the venous phase (dashed arrows). Notice the narrow internal jugular vein anterior to the new vein.



B. A lateral projection of cerebral angiogram demonstrating the posterior condylar vein in the venous phase (solid arrows).

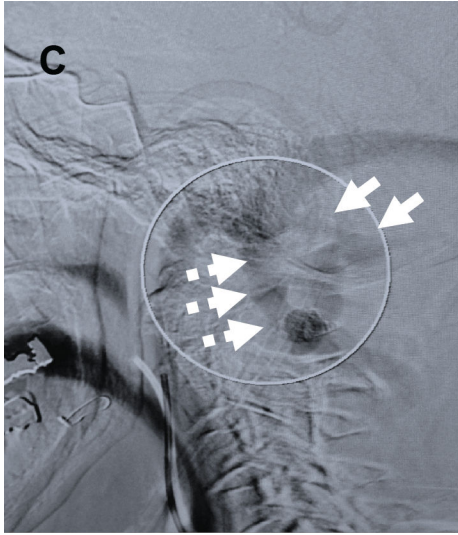
The venous efflux from cerebral dural venous sinus into the extracranial venous drainage is predominantly based on sigmoid venous sinus draining into the internal jugular vein. In the fetal stage, the rapid growth of cerebral hemispheres leads to an enlargement of transverse venous sinuses in somewhat disproportionate manner to growth of sigmoid venous sinus and internal jugular vein. Therefore, emissary veins are necessary to ensure adequate efflux pathways for intracranial venous drainage. A variable number of emissary veins may persist after the fetal stage [2–4]. Some of the important emissary veins include the mastoid emissary vein [2,3] that connect the transverse sinus with the posterior auricular or occipital veins, and the anterior and posterior condy-

lar veins that connect the terminal sigmoid venous sinus with suboccipital cavernous sinus and internal vertebral venous plexus [3,4]. In our observation, there is another vein that connects the terminal sigmoid venous sinus with the ipsilateral external jugular vein. The vein appears to originate at the horizontal section of the terminal segment of sigmoid venous sinus as it enters the internal jugular vein (see Figure). This vein appears to exit from a dorsal foramen within the wall of the jugular foramen. The vein can be prominent even in the presence of a large patent internal jugular vein and posterior condylar vein (see Figure). Occasionally, individuals with such a vein report tinnitus which may be self-limiting. The vein may also become noticeable after internal jugular vein thrombosis or fibrosis subsequent to intravascular catheter placement(s). The prevalence and physiological importance of this vein requires further study. Further studies also need to delineate whether the

Published November, 2014.

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C. A lateral projection of cerebral angiogram demonstrating the new vein (dashed arrows) and the posterior condylar vein in the venous phase (solid arrows).

structure of the vein is similar to an emissary vein (valveless) or a typical vein with valves.

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