

The **Arachnoid Villi** (*granulationes arachnoideales; glandulae Pacchioni; Pacchionian bodies*) (Fig. 769) are small, fleshy-looking elevations, usually collected into clusters of variable size, which are present upon the outer surface of the dura mater, in the vicinity of the superior sagittal sinus, and in some other situations. Upon laying open the sagittal sinus and the venous lacunae on either side of it villi will be found protruding into its interior. They are not seen in infancy, and very rarely until the third year. They are usually found after the seventh year; and from this period they increase in number and size as age advances. They are not glandular in structure, but are enlarged normal villi of the arachnoid. As they grow they push the thinned dura mater before them, and cause absorption of the bone from pressure, and so produce the pits or depressions on the inner wall of the calvarium.

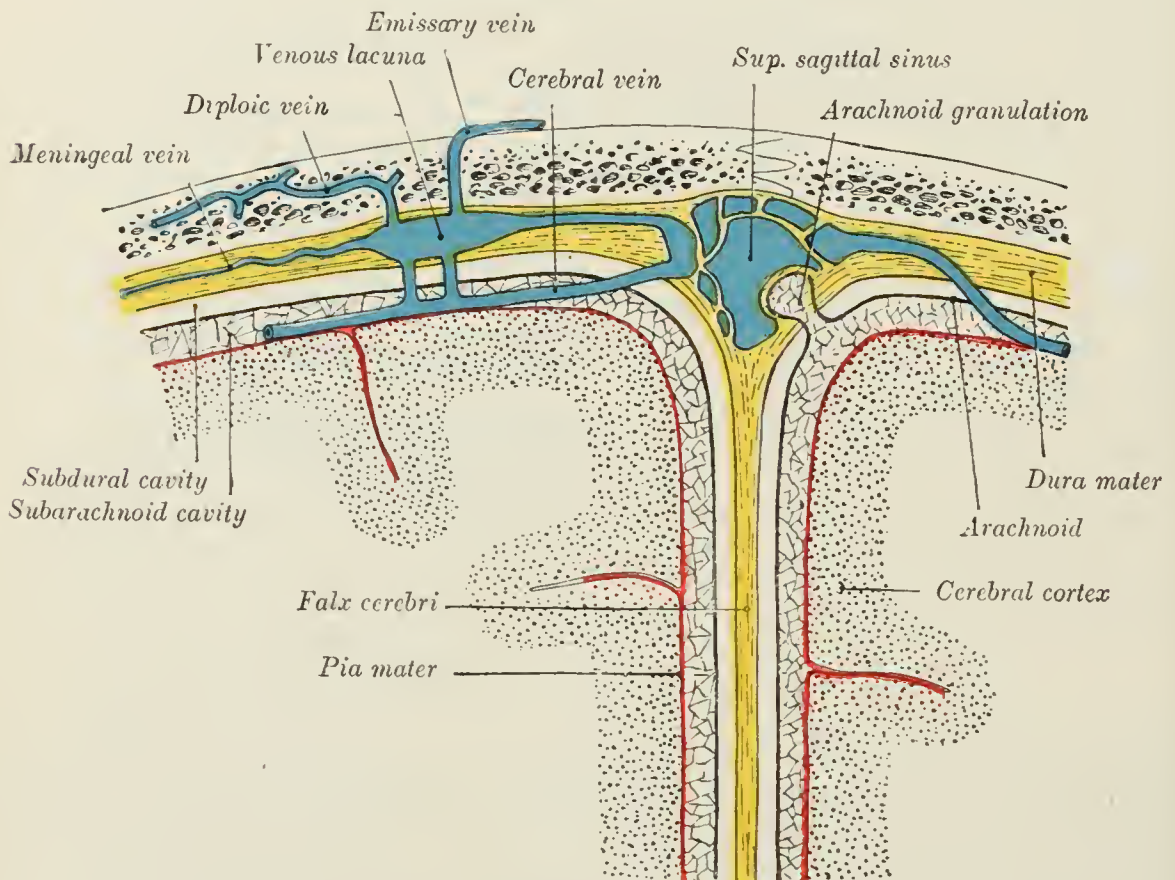


FIG. 769.—Diagrammatic representation of a section across the top of the skull, showing the membranes of the brain, etc. (Modified from Testut.)

Structure.—An arachnoidal villus represents an invasion of the dura by the arachnoid membrane, the latter penetrates the dura in such a manner that the arachnoid mesothelial cells come to lie directly beneath the vascular endothelium of the great dural sinuses. It consists of the following parts: (1) In the interior is a core of subarachnoid tissue, continuous with the meshwork of the general subarachnoid tissue through a narrow pedicle, by which the villus is attached to the arachnoid. (2) Around this tissue is a layer of arachnoid membrane, limiting and enclosing the subarachnoid tissue. (3) Outside this is the thinned wall of the lacuna, which is separated from the arachnoid by a potential space which corresponds to and is continuous with the subdural cavity. (4) And finally, if the villus projects into the sagittal sinus, it will be covered by the greatly thinned wall of the sinus which may consist merely of endothelium. It will be seen, therefore, that fluid injected into the subarachnoid cavity will find its way into these villi, and it has been found experimentally that it passes from the villi into the venous sinuses into which they project.

The Pia Mater.

The **pia mater** is a vascular membrane, consisting of a minute plexus of blood-vessels, held together by an extremely fine areolar tissue and covered by a reflexion of the mesothelial cells from the arachnoid trabeculae. It is an incomplete mem-