Septum pellucidum

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The septum pellucidum (also called the septum lucidum), and not to be confused with the medial septum, is a thin, triangular, vertical membrane separating the anterior horns of the left and right lateral ventricles of the brain. It runs as a sheet from the corpus callosum down to the fornix.

Layers

The septum pellucidum actually consists of two layers or laminae of both white and gray matter, called the laminae septi pellucidi. During fetal development there is a space between the two laminae called the cavum septum pellucidum which, in ninety per cent of cases, disappears during infancy. The cavum is occasionally referred to as the fifth ventricle but the term has lost favor in recent years, as the space is usually not continuous with the ventricular system. Indeed fifth ventricle has been used for other purposes in recent years.

Location

The septum pellucidum is located in the midline of the brain, between the two cerebral hemispheres. It is attached inferior to the corpus callosum, the large collection of nerve fibers that connect the two cerebral hemispheres. It is attached to the anterior part of the fornix, and on either side of the structure are the two lateral ventricles.

Confusion over the term

The septum pellucidum is often confused with the septal nuclei. Logically, the septum pellucidum is a septum in the medial plane and could therefore be termed 'medial septum', but this is incorrect. The term medial septum is reserved for a small group of nuclei which are closely associated with the septum pellucidum.

Pathology

Absence of the septum pellucidum or corpus callosum, caused by mutations in the HESX1 gene, is associated with septo-optic dysplasia. This may result in hypothalamic dysfunction and hypopituitarism, as well as problems of vision, coordination, and intelligence, as well as other unusual symptoms.