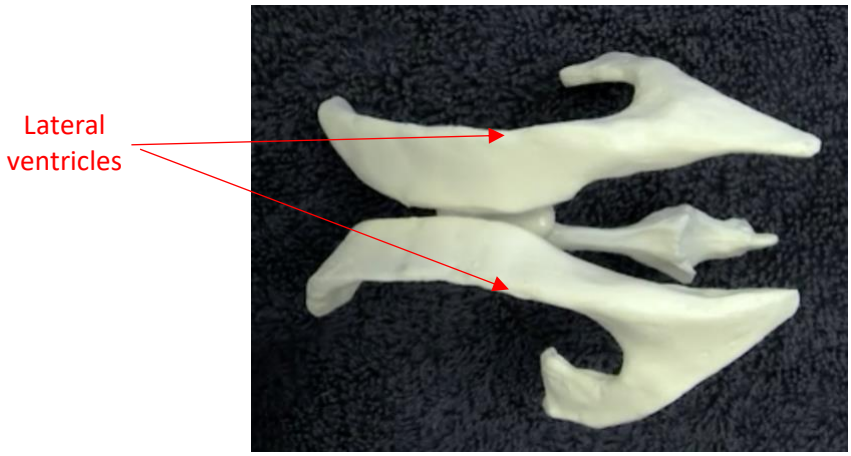
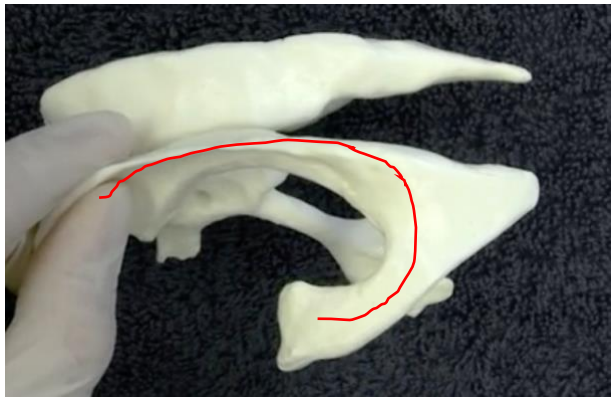
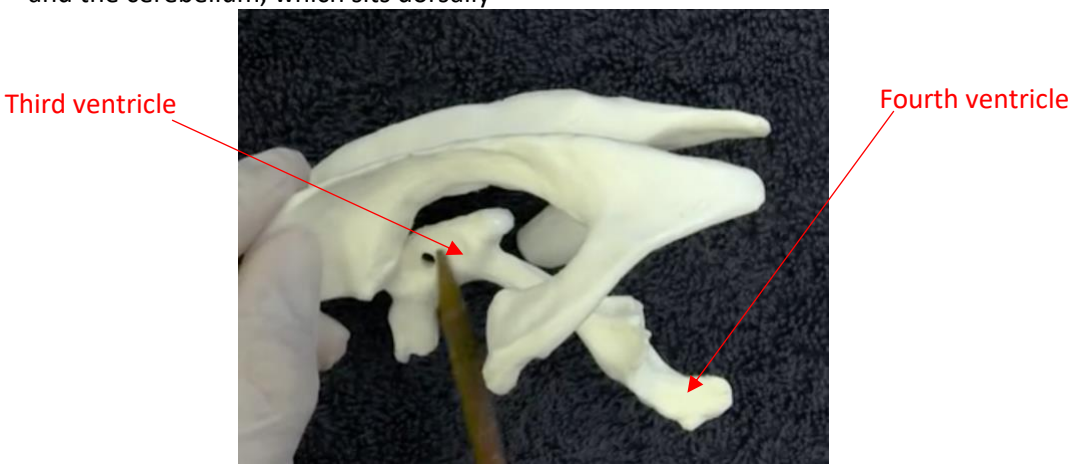
Ventricles and the ventricular system



- When the **lateral ventricles** are viewed from the side they form a C shape (image below). This is a common feature of several of the structures of the brain



- The **third ventricle** is formed by the space between the 2 hemispheres, more specifically the space between the diencephalon which encompasses the thalamus and the hypothalamus
- The **fourth ventricle** is contained in the space between the brain stem, which sits ventrally and the cerebellum, which sits dorsally



Cerebrospinal fluid – CSF

- CSF produced by the choroid plexus in the ventricles
- CSF flows in a specific direction and starts in the 2 lateral ventricles before flowing into the third ventricle and then the fourth ventricle.
- CSF passes through a series of channels known as **foramen**

- The **foramen of Monro** is also known as the **intraventricular foramen**. It allows CSF to pass from the 2 lateral ventricles into the third ventricle.
- CSF then flows through the **cerebral** or **mesencephalic aqueduct** from the third to the fourth ventricle
- Finally, CSF exits the ventricular system through the **foramen of magendie** (found on the midline of the fourth ventricle) or the **2 foramina of luschka** (found laterally on the fourth ventricle)