



# SANAMI

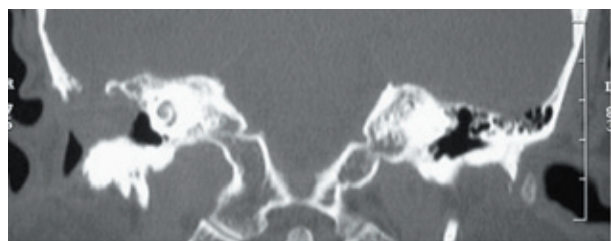
Sydney Acoustic Neuroma and Meningioma Institute

## Brain in the Ear (Encephalocele/ Meningoencephalocele)

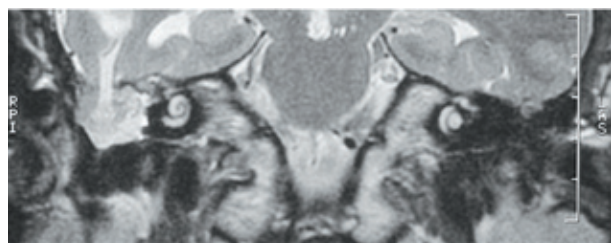
Brain falling (herniating) into the ear is a serious problem. The middle ear is a relatively clean part of the body, however, it is connected to the nose, via the Eustachian (or ear equalizing) tube. If there is a communication between the brain and the ear, then a cold or flu that affects the nose can travel to the ear and potentially cause meningitis, or even more serious brain infections. To prevent these brain infections, closure of the hole between the ear and brain is recommended.

The cause of a communication between the brain and the ear can be a congenital birth weakness, after head injury, after surgery or from tumours.

Diagnosis of the brain fluid in the ear is usually made on clinical suspicion, followed by collection of some of the fluid to test for a particular protein called beta 2 transferrin. High quality CT and MRI imaging is required to identify the actual communication sites, so that surgery can be planned appropriately (figures 8 and 9).



**Figure 8 – CT scan of a brain hernia into the ear.**



**Figure 9 – MRI scan showing the brain hernia into the ear.**

Treatment of brain herniating into the ear requires ear and skull base surgery to seal the area that is leaking and that could potentially cause meningitis. Your SANAMI team that assesses brain hernia through the ear includes specialist skull base neurosurgeons and a neurotologist (ear surgeon with specialist skull base training). The team discusses each case, evaluates the CT/MRI images and offers the most appropriate surgical option based on each person's individual circumstance. Along with your specialist surgical team our group only works with specialist trained neurosurgical anaesthetists, neurosurgical/ neurotological surgical nurses and neurosurgical ICU nurses.

If surgery is appropriate for you and you elect to proceed with the operation, then your first post operative night and day will be in one of Australia's most well respected and largest ICU units, North Private ICU. The surgery may also be combined with one or several days of brain fluid drainage from either the back or skull to keep the fluid pressure low around the repair site, and this requires a longer stay in ICU. The rest of your aftercare will be in a specialist neurosurgical post operative ward with neurosurgical nurses.

At SANAMI we look forward to providing you with the highest quality, most ethical, comprehensive and compassionate care possible. Visit the SANAMI difference [www.sanami.com.au](http://www.sanami.com.au)

