

Oral presentation

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## Decompensation of 'arrested hydrocephalus' - 2 case studies

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### Background

A significant proportion of spina bifida (SB) children have a ventriculo-atrial or ventriculo-peritoneal shunt inserted in the neonatal period for hydrocephalus. Those felt to be non-shunt dependent may develop active hydrocephalus in later life. Symptoms can include headache, cognitive decline, and drowsiness. We present 2 cases of unusual presentations of raised intracranial pressure (ICP) in SB patients in their 5th and 6th decades.

### Materials and methods

Review of charts and investigations.

### Results

Patient A initially attended our Clinic in 1990, aged 39. In 2004 she developed ooze from her previously surgically closed defect site, which continued intermittently for 7 months. She received several courses of antibiotics, and magnetic resonance imaging (MRI) failed to reveal a track for CSF, or evidence of soft tissue infection. In 2006 she had an episode of loss of consciousness, associated with headache and a recurrence of the discharge. CT scans bore the appearance of chronic arrested hydrocephalus, but no evidence of raised ICP. Following consultation with the neurosurgeons, infusion studies confirmed elevated ICP and a shunt was inserted, with symptomatic improvement.

Patient B also first attended in 1990, and was reviewed regularly without evident neurological deterioration. In 1994, aged 44, she experienced a low-impact road traffic accident. Following this she complained of slurred

speech, reduced hearing, and bilateral facial weakness. CT confirmed ventriculomegaly without signs of raised ICP, and over several months the symptoms improved. In 1997, the symptoms gradually recurred, and progressed. CT was unchanged, but MRI suggested raised ICP, and Neurosurgical referral was made. Infusion studies confirmed raised ICP and the patient received a shunt with improvement in symptoms.

### Conclusion

Previously arrested hydrocephalus may become active, without features of raised ICP on CT scan. Presenting features may be subtle and seemingly transient, and where there is a high index of suspicion, MRI and/or infusion studies may be diagnostic. Symptoms may be reversible on insertion of a shunt, with corresponding improvement on quality of life.