

A young man presents with 24 hours of headache, lethargy, nausea and vomiting. He becomes dysphasic and pyrexial with a GCS of 12. CT reveals a 4 cm left posterior frontal ring-enhancing lesion.

Which one of the following would be the most appropriate?

- A. Commence broad spectrum antibiotics followed by diagnostic aspiration of the lesion
- B. Commence dexamethasone and plan MR scan the next day
- C. High dose antibiotics as advised by microbiology and re-image after 48 hours
- D. Immediate diagnostic aspiration followed by antibiotics as advised by microbiology
- E. Immediate surgical excision of the lesion followed by antibiotics as advised by microbiology

A 24 year old patient is investigated on ITU, following a severe head injury. The following results are obtained.

Serum Na	120 mmol/l
Serum osmolality	210 mOsm/l
Urinary Na	80 mmol/L
Urinary osmolality	295 mOsm/l
Urine Volume	1250 ml / 24 hrs

The electrolyte results given here indicate which one of the following?

- A. Cerebral salt-wasting syndrome
- B. Diabetes insipidus
- C. Elevated atrial natriuretic factor
- D. Mannitol overdose
- E. Syndrome of inappropriate anti-diuretic hormone

A 45 year old woman presents with double vision. On examination there is loss of abduction of the right eye, dilated right pupil and decreased sensation over the right cheek.

Which of the following is the most likely finding on a MRI scan?

- A. Basilar artery aneurysm
- B. Internal carotid artery aneurysm
- C. Midbrain glioma
- D. Planum sphenoidale meningioma
- E. Pontine glioma

During craniotomy for a parasagittal meningioma the anaesthetist warns you of likely air embolism.

Which one of the following manoeuvres would not be appropriate?

- A. Find and occlude the site of air entry
- B. Lower the patient's head
- C. Rotate the patient right side down
- D. Use vasopressors to resuscitate the patient
- E. Ventilate the patient with 100% oxygen

Refer to the following exhibit(s) to answer this question: exhibit 0, exhibit 1

A 39 year old man, presents with severe back pain at night with bilateral lower limb claudication. Neurological examination showed spastic paraparesis with T12 sensory level and café au lait spots on his back. MRI scan of the thoracic spine with contrast is shown (see exhibits).

Which of the following would be the next step in the management?

- A. CT chest abdomen and pelvis
- B. Electromyography and nerve conduction studies
- C. Genetic testing of the patient
- D. Microsurgical resection of the lesion
- E. MRI of the whole neuro – axis with contrast