

Candidate No.:



ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

**Neurosurgery
Fellowship Examination**

First Paper
Essay Questions - 1.5 hours

Wednesday 22 April 2009

All Questions must be answered and are of equal value. Question three consists of 30 multiple choice components.

Question 1

A 39 year old right handed male presents with 2 focal seizures, with no residual Neurology. Non contrast CT and MRI reveals an abnormality as shown below (Figures 1-4)

What is the likely pathology, and what are the alternate management pathways? Give an account of your preferred option for this patient, with rationale.



Figure 1. Non Contrast CT

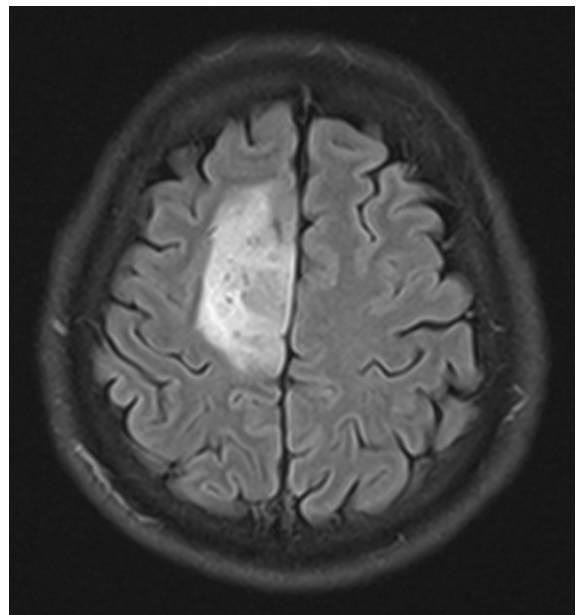


Figure 2. FLAIR MRI

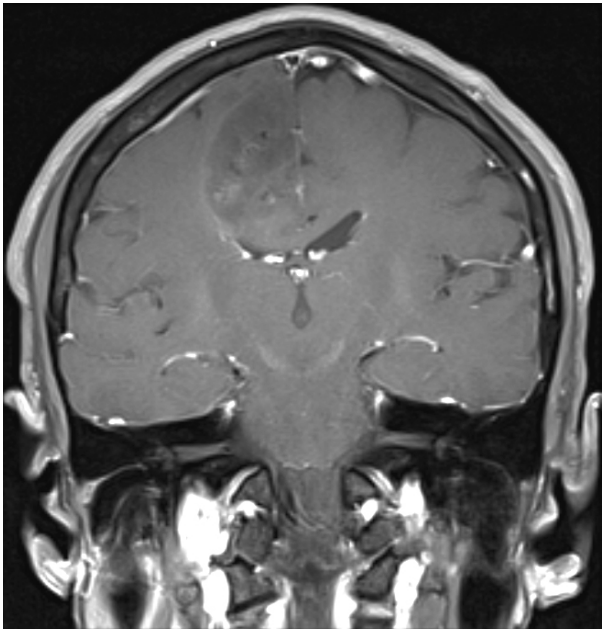


Figure 3. Contrast T1 MRI Coronal

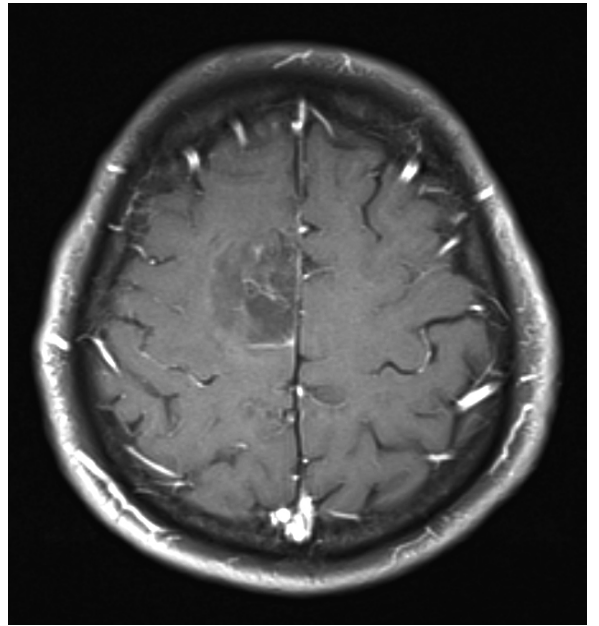


Figure 4. Contrast MRI T1 Axial

Question 2

Write notes on:

- a) Diastatomyelia
- b) The House-Brackman grading scale for facial paresis
- c) Lumbar Spondylolisthesis
- d) Neuroprotection during temporary Middle cerebral Artery occlusion

Question 3

Neurosurgery MCQ Paper (30 questions - 30 minutes)

Please follow instructions as detailed on accompanying MCQ Paper



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Second Paper - 2 hours

Wednesday 22 April 2009

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Question 4

A 44 year old intravenous drug user presents with severe neck pain, pyrexia and rapidly progressive quadriparesis. Urgent MRI is performed as shown below (Figure 1 and 2).

What are the management options both medical and surgical? Give reasons for your preferred option plan of action.

What are the potential long term complications for this patient's spine?

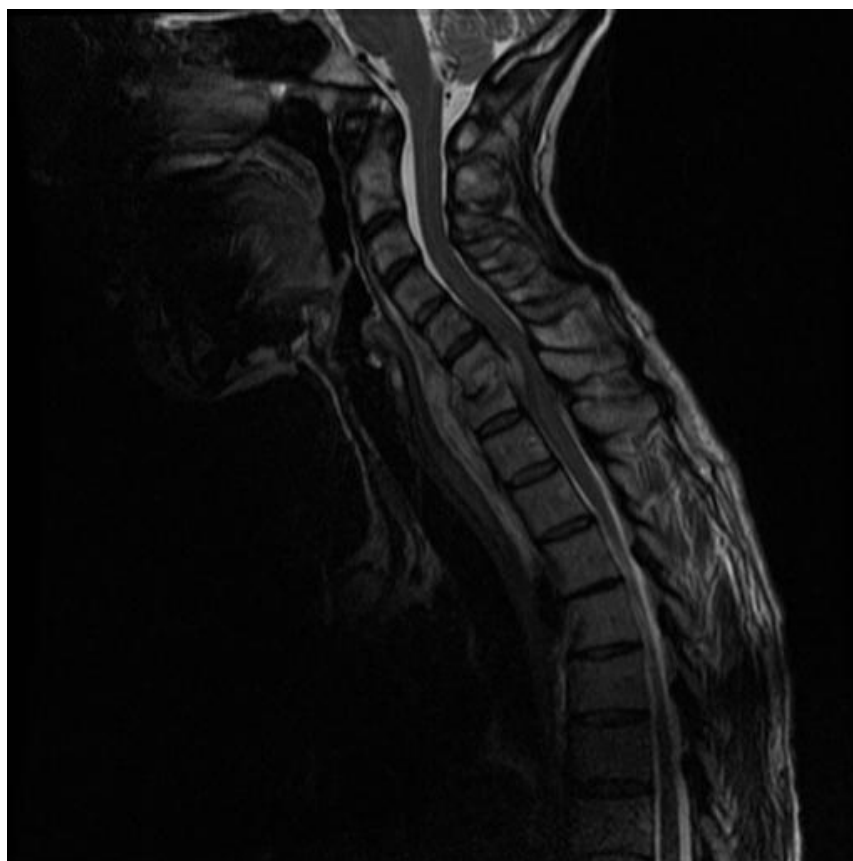


Figure 1.



Figure 2.

Question 5

Write notes on the following:

- a) Pituitary apoplexy
- b) Hypophysitis
- c) Management of pituitary tumours during pregnancy
- d) Medical treatment of pituitary tumours

Question 6

Explain the underlying pathology and anatomy of the neurological progression that occurs as a patient deteriorates due to a supratentorial space occupying lesion; from a focal neurological deficit through coma to death.