



**ROYAL AUSTRALASIAN COLLEGE OF SURGEONS**  
**FELLOWSHIP EXAMINATION IN NEUROSURGERY**

FIRST PAPER - 2 HOURS

MONDAY, 27 AUGUST 2007

**All Questions must be answered and are of equal value**

**Question 1**

A 48 year old Lefthanded male presents after a major tonic clonic seizure with no neurology but MRI shows a non-enhancing lesion in the Right hemisphere (figure 1). He is observed with serial scanning but after 12 months there has been demonstrable enlargement of the still non-enhancing abnormality and a decision is made to treat. Discuss the issues to consider under the following headings:

- Preoperative considerations
- Operative approach including anaesthesia
- Postoperative management according to Histological diagnosis

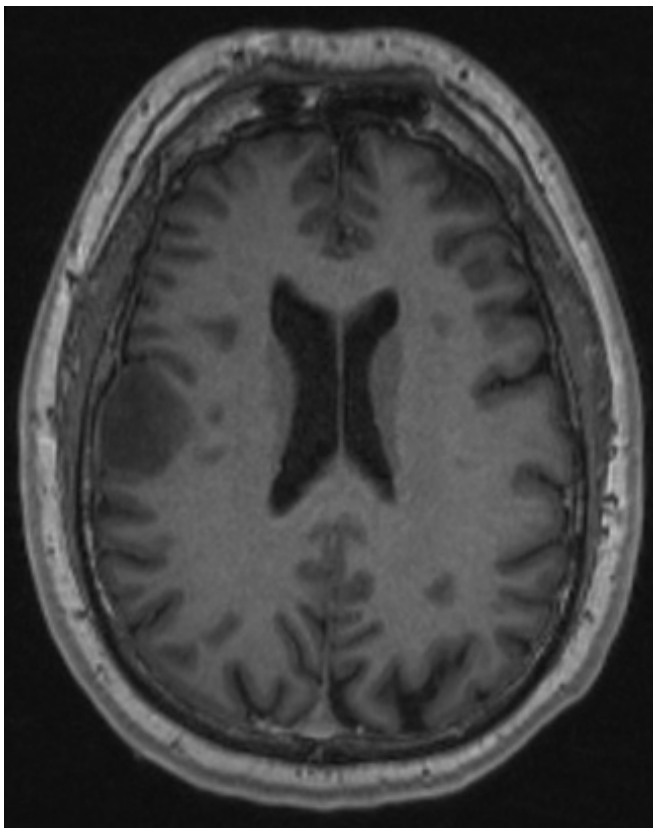


Figure 1

## Question 2

Write notes on:

- a. Pituitary apoplexy
- b. Prion diseases affecting the nervous system
- c. Neurosurgical audit-methods and uses
- d. Lumbar spinal canal stenosis

## Question 3

Neurosurgery MCQ Paper - **(30 questions - 30 minutes)**. Please follow instructions as detailed on accompanying MCQ Papers.



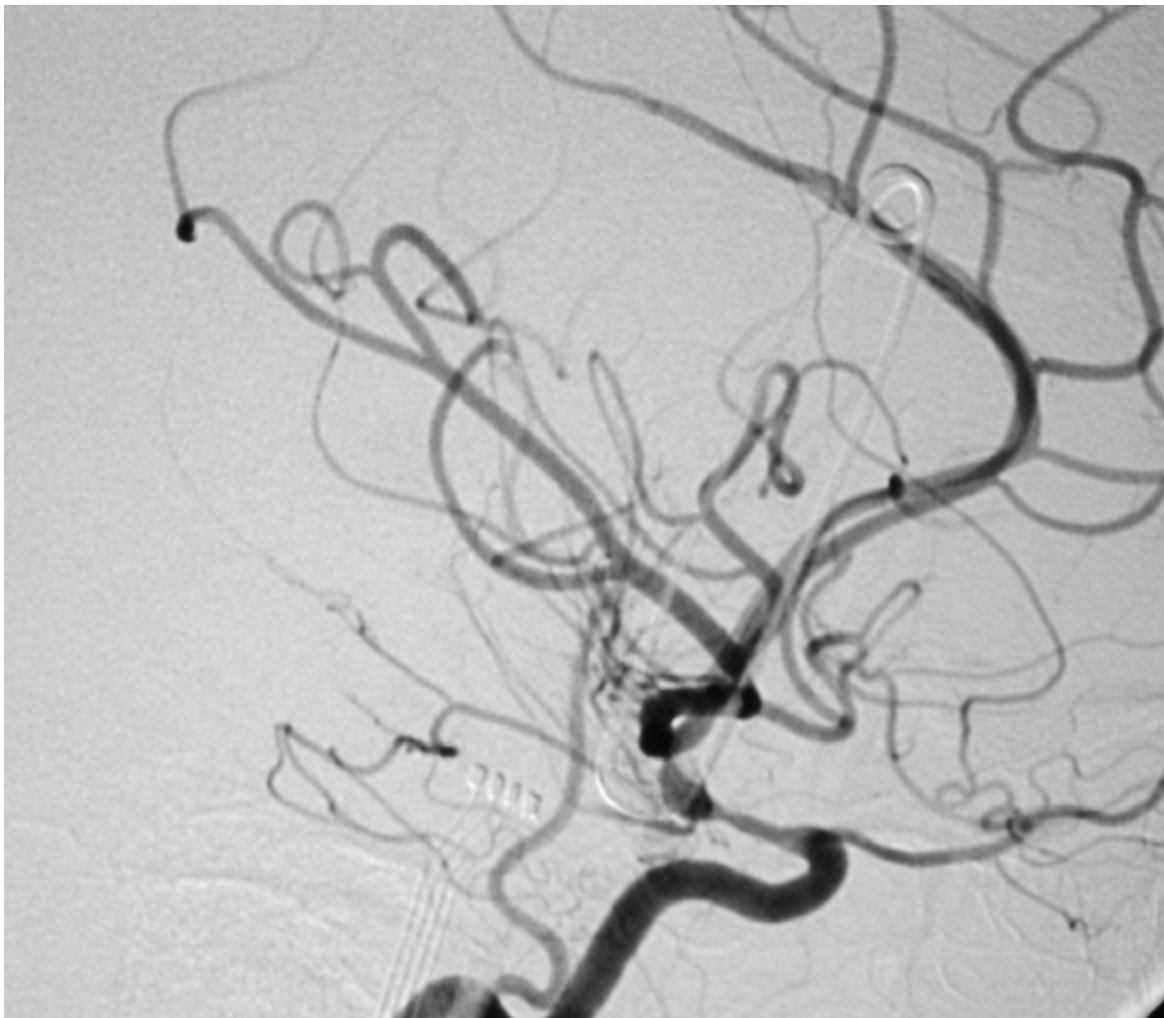
**ROYAL AUSTRALASIAN COLLEGE OF SURGEONS**  
**FELLOWSHIP EXAMINATION IN NEUROSURGERY**

SECOND PAPER - 2 HOURS

MONDAY, 27 AUGUST 2007

All Questions must be answered and are of equal value

**Question 1**



Seven days following a subarachnoid haemorrhage and repair of a right posterior communicating artery aneurysm Jane Smith, a 56 year old previously healthy mother of two, developed a left hemiparesis having been neurologically normal up until this day. She has been in the neurosurgical ward on oral nimodipine. A right internal carotid artery angiogram was performed at the time. The remainder of the angiogram was normal.

Please answer the following:

- i) How do you interpret the angiogram?
- ii) What actions do you wish to institute at this time and why?
- iii) The husband wishes you to explain and write down (so that he, a lay person, can understand) what has happened to Jane and what are the risks, expectations and alternatives of management from this point onwards.

### **Question 2**

Give a detailed account of the anatomy of the L4-5 lumbar intervertebral disc. Describe the pathological and age related changes which may occur and the associated clinical features.

### **Question 3**

Write notes on:

- a. Intracranial abnormalities associated with Chiari malformation
- b. Discuss the anatomical and physiological bases of the blood brain barrier, and their clinical implications.
- c. Current ventricular shunt technologies