



SNS COLLEGE OF ALLIED HEALTH SCIENCES
SNS Kalvi Nagar, Coimbatore - 35
Affiliated to Dr MGR Medical University, Chennai



DEPARTMENT OF RADIOGRAPHY AND IMAGING TECHNOLOGY

COURSE NAME : Modern Imaging techniques and recent trends in imaging.

UNIT : 3

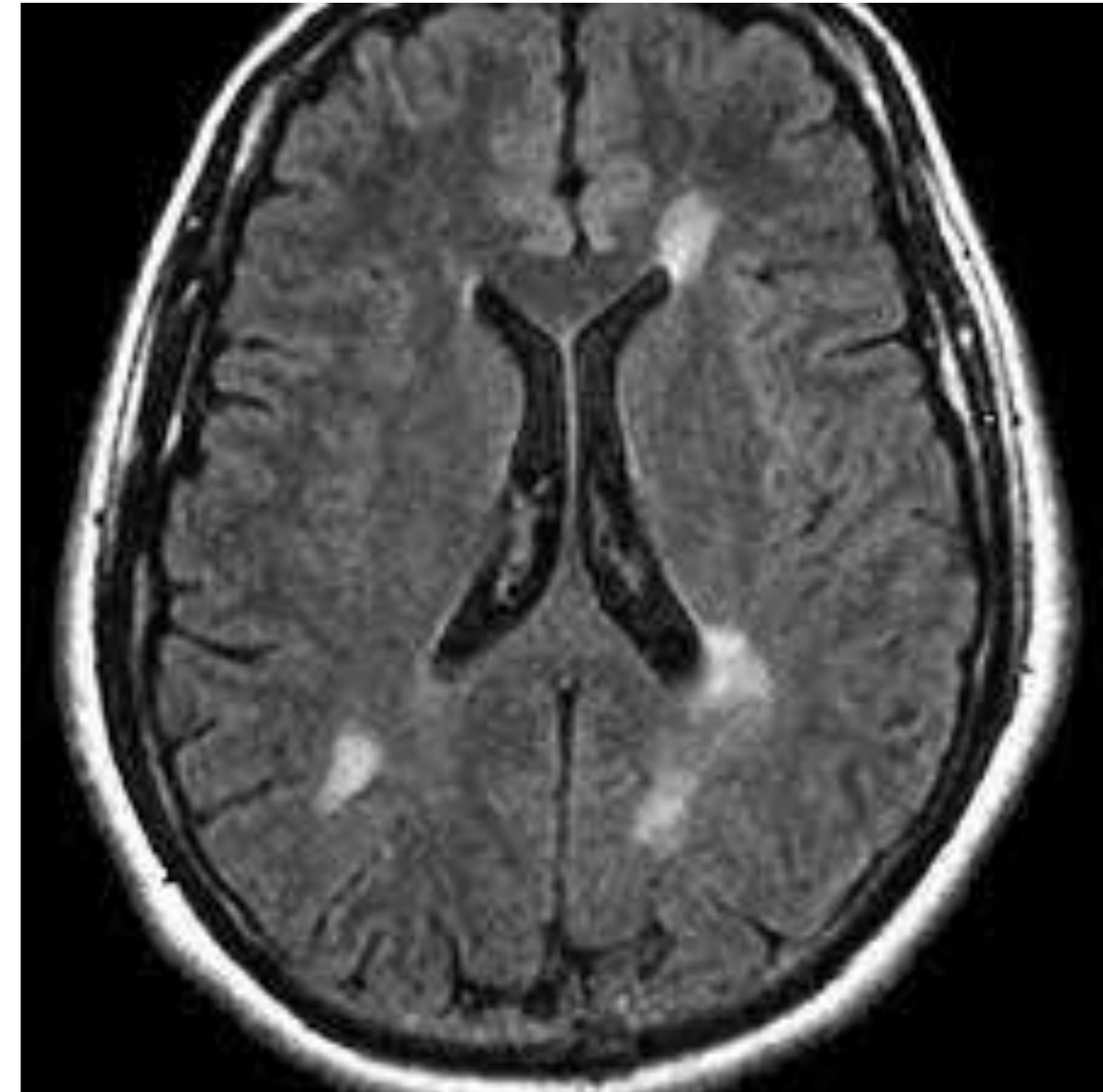
TOPIC : MRI ROUTINE BRAIN PROTOCOL



INTRODUCTION



Magnetic Resonance Imaging(MRI) is a medical imaging technique that uses a magnetic field and radiowaves to produce detailed images of the brain .





ROUTINE BRAIN PROTOCOL



□ INDICATIONS:

- Infections
- Inflammation
- Multiple Sclerosis
- Epilepsy
- Infarction
- Hemorrhage
- Hearing loss
- Seizures
- Loss of consciousness



ROUTINE BRAIN PROTOCOL



❑ CONTRAINDICATIONS:

- All metallic and electric objects
- Pacemakers
- Cochlear implants
- Ferromagnetic substances
- Metallic foreign bodies
- Intra cranial aneurysm clips



ROUTINE BRAIN PROTOCOL



□ PATIENT PREPARATION:

- Satisfactory written consent should be taken from the patient.
- If contrast is used, then risk and benefits should be explained.
- Explain the procedure to the patient.
- Instruct the patient to remain still during the examination.
- If possible, provide an attendant for patient.
- Note the weight of the patient.



ROUTINE BRAIN PROTOCOL



□ EQUIPMENTS:

- Head coil
- Immobilization pads and straps
- Earplugs/headphones



ROUTINE BRAIN PROTOCOL



PATIENT POSITIONING:

Head first - Supine

LANDMARK

The longitudinal alignment light lies in the midline, and the horizontal alignment light passes through the nasion.

MODE OF SCANNING:

2D



ROUTINE BRAIN PROTOCOL



□ SCOUT:

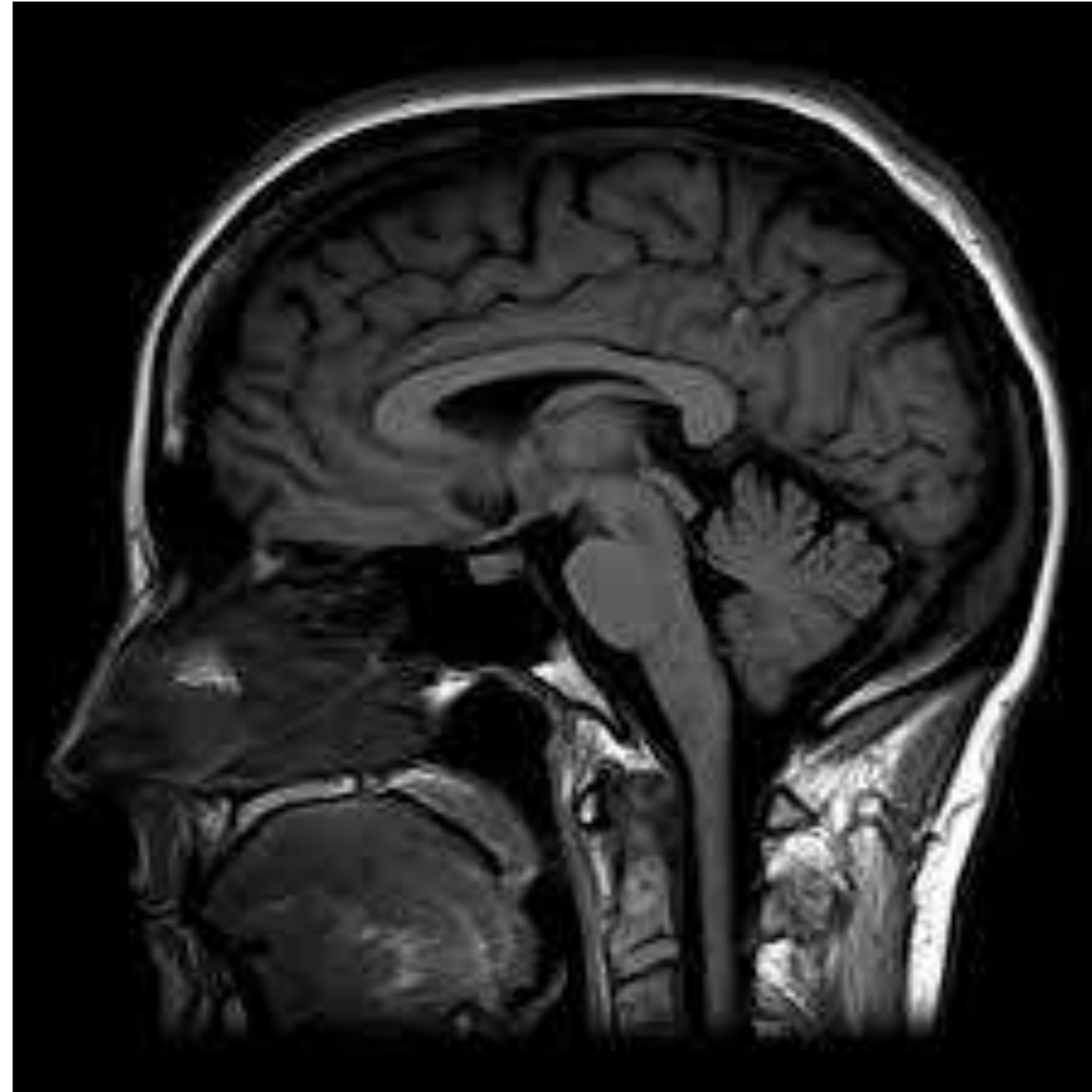
3 plane localizer.

□ PULSE SEQUENCES:

- DWI axial
- FLAIR axial
- SWI axial
- T2W axial
- T1w axial
- T2 coronal
- T2 sagittal.

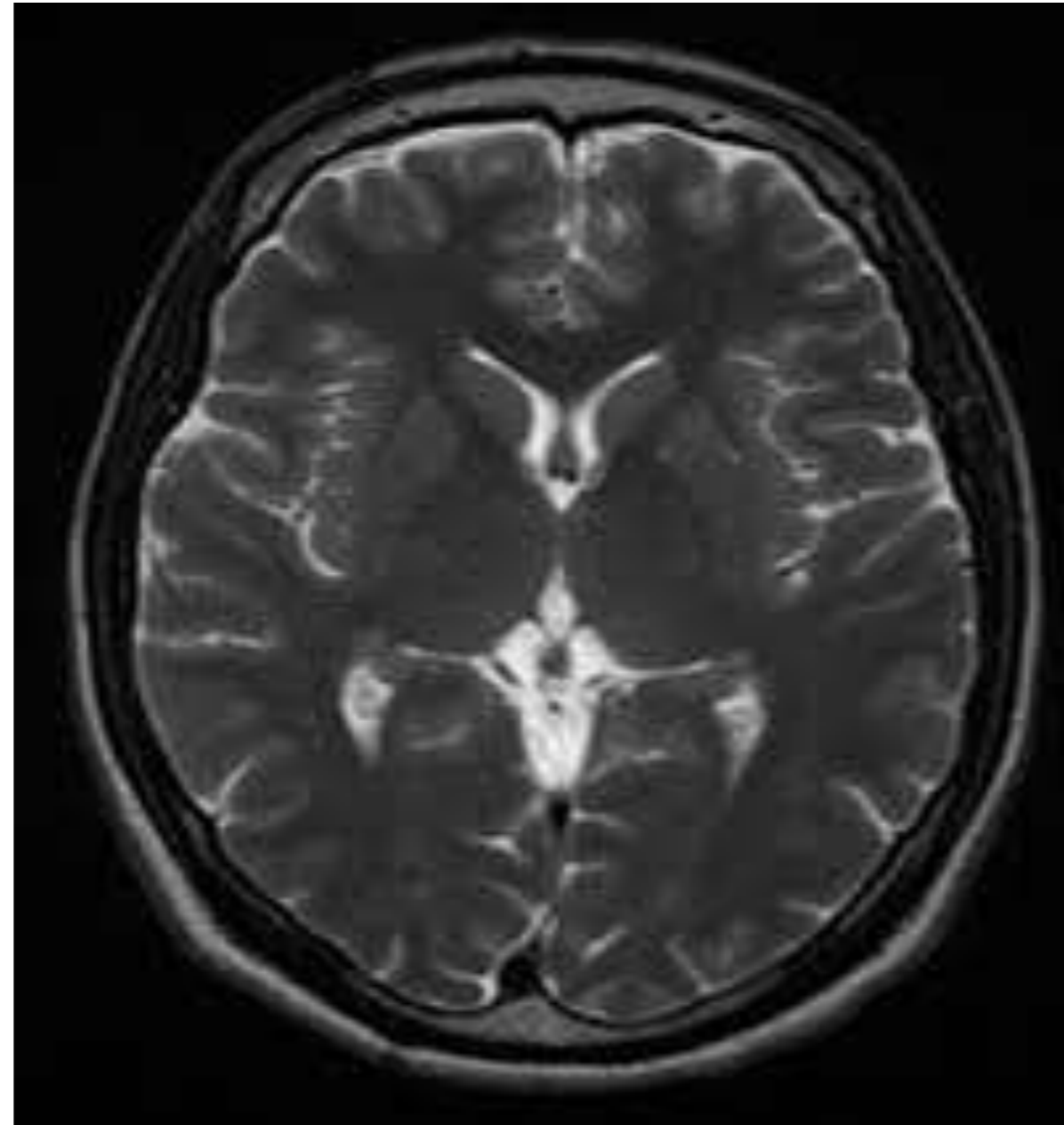


SAGITTAL VIEW OF MRI BRAIN





AXIAL VIEW OF MRI BRAIN





CORONAL VIEW OF MRI BRAIN





THANK YOU