

# What is a CT Scan?

- A **Computed Tomography (CT)** scan uses X-rays to make detailed pictures of structures inside of the body.

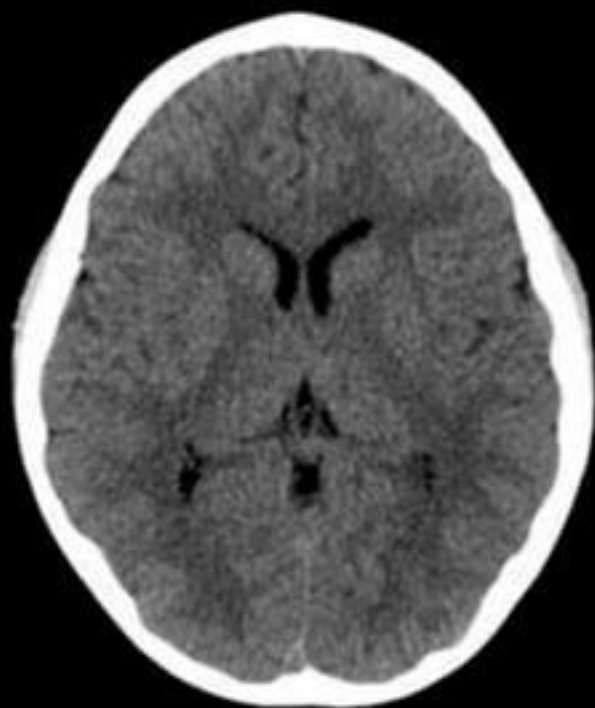


# What is a MRI Scan?

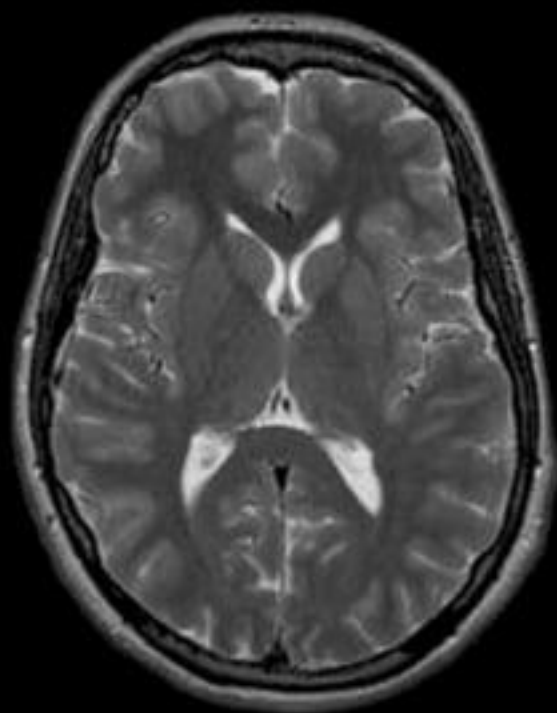
- **Magnetic resonance imaging (MRI)** is a test that uses a magnetic field and pulses of radio wave energy to make pictures of organs and structures inside the body.



CT



MRI



CT



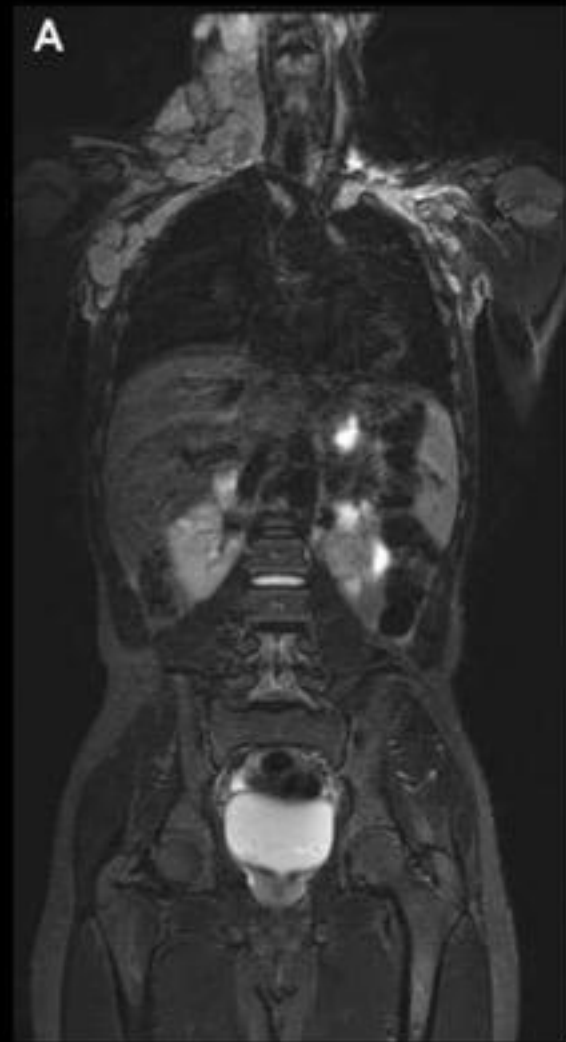
MRI



CT



MRI



# Advantages to CT

- Quick and painless
- Costs less than MRI
- Better availability compared to MRI
- Shows up acute bleed
- Good visualization of bony structures and calcified lesions
- Can detect or exclude the presence of more serious problems

# Disadvantages to CT

- Exposure to ionising radiation
- Resolution
- Beam-hardening artifact
- Injection of a contrast medium (dye) can cause kidney problems or result in allergic or injection-site reactions in some people
- Some procedures require anaesthesia

# Advantages to MRI

- No radiation exposure
- Good resolution
- 3-D reconstruction
- Good gray-white differentiation
- Adjust settings based on characteristics of the lesion
- Gadolinium contrast is relatively nontoxic

# Disadvantages to MRI

- Cost
- Some patients ineligible because of pacemakers, other metal
- Claustrophobia
- Lengthy and noisy procedure
- Limited availability