# INTRODUCTION

Spinal infections are serious clinical conditions that carry high morbidity and mortality rates, particularly when the diagnosis is not made in a prompt manner or they are misdiagnosed or treated improperly. Delayed diagnosis usually leads to neurological deficit, permanent spinal deformities or even death ***(Ruiz et al., 2000).***

Spinal infections may involve bony structures (osteomyelitis), the disc (diskitis), the epidural space (epidural abscess), subdural space (subdural empyema), the subarachnoid space (meningitis), or the cord itself (myelitis or cord abscess) ***(Ruiz et al., 2000).*** They can be classified according to the causative organism into bacterial, viral, fungal and parasitic infections, ***(Smith and Blasser, 1991).***

Early diagnosis of spinal infections will decreases morbidity in many cases ***(Grossman, 1996).*** Although a clinical diagnosis of infections of the spine can sometimes be made in patients presenting with fever, elevated sedimentation rate and back pain, confirmation of the diagnosis is nearly always made on imaging studies ***(Rothman, 1996).***

***Rothman, 1996,*** reported that many diagnostic studies can be made to diagnose spinal infections such as plain radiography, radionuclide bone imaging, CT scanning and MR imaging

***Post et al., 1990,*** reported that MRI has revolutionized the evaluation of the vertebral column and its contents, ***Rothman, 1996,*** added that MR scanning is the imaging procedure of choice for the evaluation of patients suspected of having spinal infections and MRI has become the gold standard in the evaluation of disc space infection and osteomyelitis.

Gadolinium enhanced MRI studies are superior to any other imaging modality for early recognition & anatomic localization of infectious processes of the spine ***(Kaiser & Ramos, 1990).***

Advantages of MRI include its multiplanar capabilities and soft tissue contrast resolution ***(Sharif et al., 1990),*** MRI delineates the extent of the disease which may spread to the epidural or paravertebral spaces ***(Kaiser & Ramos, 1990),*** MR imaging is valuable for diagnosis in the early stages of the infection. ***(Gillams et al., 1996).***