

CAN PATTERNS OF CLINICAL PRESENTATION IN ACUTE SPINAL PATHOLOGY PREDICT DIAGNOSIS AND TREATMENT IN A SPINE SURGICAL UNIT?

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Background: The clinical presentation of acute spinal pathology is varied. Traditionally, features suggestive of a serious underlying abnormality include perianal anaesthesia, decreased anal tone, abnormal neurology or urinary/bowel dysfunction. In our experience though, these do not always result in a positive radiological diagnosis or predict the need for surgery. There is currently a paucity of literature identifying clinical patterns able to do this. Aim: To determine whether clinical features of acute spinal disease can be correlated to either a positive diagnosis on magnetic resonance imaging (MRI) or the need for surgery. Methods: Between April 2006 and February 2007 retrospective analysis of data from 100 patients who underwent urgent MRI was undertaken. Setting: University Teaching Hospital with a dedicated spinal surgery unit. Results: The main conditions encountered were disc disease, spinal stenosis and spinal metastases. Using the Pearson Chi-Square test we found that patients with perianal anaesthesia were likely to undergo surgery ($p=0.006$), in contrast to those with subjective neurology ($p=0.017$) or sciatica ($p=0.004$) in whom conservative treatment was favoured. No correlation could be determined between a positive radiological diagnosis and perianal anaesthesia, decreased anal tone, abnormal neurology or urinary/bowel dysfunction. Discussion: Predicting the need for spinal surgery in acute neurological/neurosurgical problems has not been discussed previously. Our results show that patients presenting with perianal anaesthesia are more likely to undergo surgery whereas those with subjective neurology or sciatica are not. On the other hand, features suggestive of spinal cord or neural compression did not correlate with radiological findings.