Asymptomatic spina bifida occulta involving sacrum in an elderly female

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It has been estimated that 20% of all myelomeningoceles involve the sacral level and majority of these patients with sacral level lesions have fewer complications than with high level lesions. (1-5)



Figure 1 - Posterior view of the sacrum shows a dry bone specimen of sacral spina bifida occulta, where there is failure of closure of the sacral canal at all sacral levels

A 60 year female presented with low back pain of two year duration, non-radiating in nature but increased by bending forward. There was no history of bowel or bladder disturbances. She had swelling over low back region since childhood not associated with pain. Her general and systemic examination was normal. There was diffuse, non-tender, non-pulsatile swelling over sacral region. Skin over the swelling was healthy. Plain lumbosacral x-ray demonstrated a sacral bone defect. Pelvic computed tomography (CT) showed a defect at the dorsal aspect of the sacrum with diffuse soft tissue swelling (Figure 1). Patient responded to conservative management and physiotherapy. There are many reports on the incidence of sacral spina bifida occulta and it has been suggested that 90-100% of patients with a sacral level lesion are ambulant. (1, 6-10) The reported clinical significance of sacral spina bifida occulta ranges from an anatomical variant of little or no importance on its own to a very important cause of meningomyelocele or neurological deficits. (1, 6, 10-17) In absence of external manifestations occult spina bifida of the sacrum can be associated with a number of conditions including backache, posterior disc herniation, enuresis and functional disorders of the lower urinary tract, and neurological abnormalities of the feet. (10, 18-20) It has been hypothesized that the absence of the first sacral spinous process and the ligaments that normally run between it and the spinous process of the fifth lumbar vertebra spina bifida occulta may be associated with low back pain. (21) Awareness and knowledge of the congenital defect of sacrum must be considered before undertaking any procedure on the sacrum (i.e. caudal epidural block, internal fixation via transpedicular and lateral mass screws) as if the anomaly is overlooked it can lead to serious complications. (2, 5, 22)

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