E-Posters 317S

P263 - Evidence-Based Prevention and Treatment of Osteoporosis after Spinal Cord Injury: A Systematic Review

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Introduction: Spinal cord injury (SCI) leads to a profound reduction in bone mineral density (BMD) and disturbances of the skeletal trabecular microarchitecture. The pathogenesis of osteoporosis after SCI is complex and differs from other forms of this problem. The aim of this study is to review the most recent literature on prevention and evidence-based treatments of osteoporosis in SCI patients. Material and Methods: MED-LINE, EMBASE, PubMed and the Cochrane Library were used to identify papers from 1946 to June 17, 2015. The search strategy involved the following keywords: spinal cord injury, osteoporosis, and bone loss. Results: A total of 51 studies met inclusion criteria. Most of these studies were small and of poor or fair quality and only 15 randomized controlled trials (involving 356 patients) were found. There are low levels of evidences that Bisphosphonates (Clodronate, Etidronate, Alendronate, Zoledronic acid) in the first year after injury, Vitamin-D analogs and Alendronate plus calcium for one year and beyond are effective in the prevention or treatment of bone loss. Electrical stimulation was also useful after acute SCI. For other rehabilitation modalities after SCI data are insufficient. Conclusion: No recommendations can be made from our review, due to the variable interventions and timing and usually low levels of evidence from these studies. Therefore, more research is needed to increase the knowledge base regarding the various interventions to prevent or treat bone loss after SCI.

July 2016 of the age group 22 to 40 years. Multi centeric study done at various hospitals in Chennai. All patients with chronic low back pain were evaluated by taking history, clinical examination. Initially all the patients underwent X ray of the LS spine. Suspected cases of different pathologies underwent further radiological evaluation and eventually all the patients were taken MRI and CT screening. European Spondyloarthropathy Study Group Criteria for the classification of spondyloarthropathies and 2010 ACR/EULAR RA Classification Criteria was used to rule out Spondyloarthropathy and Rheumatoid arthritis respectively. Blood investigations were done. All patients were graded by Oswestry disability index score, Zurich claudication score and VAS. Results: Out of the 21 cases, 4 cases were diagnosed to have degenerative disc disease, 13 cases had intervertebral disc prolapse with grade 2 to 3 sacroilitis. 2 were diagnosed to have Aneursymal bone cyst. 2 cases were diagnosed to have osteitis condensans ilii. All the patients of Osteitis condenses Ilii were post partum and treated with physiotherapy, analgesics and one patient underwent steroid injections. All the patients improved symptomatically. Oswestry disability index score decreased from 96% to 9%. VAS decreased from 9 to 1 and Zurich claudication score significantly improved. Discussion: Not all cases with Sacroiliac pain are termed as Sacroilitis. Eyes should be wide open when a post partum patient comes with axial back pain and has significant SI joint tenderness. The disease presents at an early stage and it is often bilateral. Primary responsibility is to rule out other significant causes of low back pain. Physiotherapy and conservative management remains to be the safe and effective way of managing the patients. CT screening and MRI is the investigation of choice.

P265 - Cure of a Lumbar Unstable