

asymmetric weakness and atrophy of one, less commonly both distal upper extremities. Treatment of HD is controversial, traditionally conservative management is advocated while recently surgical management is preferred in refractory cases. We present our experience in management of HD using different modalities. **Material and Methods:** Data of patients diagnosed to have HD from 2016 to 2022 were collected, multiple clinical and radiological (dynamic MRI) parameters were noted. Total of 17 patients were identified out of which 14 were managed conservatively and 3 surgically. Patient outcomes were analysed at final follow up. **Results:** All were males with a mean age of 25 years. Seven had bilateral and ten had unilateral upper limb symptoms. Most common clinical finding was weakness and wasting of distal hand muscles (100%) followed by forearm weakness (59%). MRI finding seen in all was abnormal cervical curvature followed by enhancing epidural component (71%). Functional assessment was done using Jebsen Taylor Hand Function test (JTHFT). At follow up, 10 out of 14 patients managed conservatively had successful outcome (5 improved, 5 plateaued). Mean JTHFT score improved from 69.5 to 62.5 seconds. In four patients with failed conservative treatment had JTHFT score worsening from 62 to 75 seconds. All three who underwent surgery improved, with JTHFT score of 79 seconds from 54. **Conclusion:** HD is a rare condition warranting high index of suspicion for diagnosis, especially in patients of atypical age group. Reasonable outcomes are seen with conservative management in mild cases with gradual progression. Surgery is useful in failed conservative management or with severe weakness and rapid deterioration of symptoms, giving good outcomes.

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### **P430: Bilateral erector spinae plane block for postoperative pain relief in lumbar spine surgery: systematic review & meta-analysis**

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**Introduction:** Erector spinae plane block (ESPB) is growing in popularity over the recent past as an adjuvant modality in multimodal analgesic management following LSS. The current meta-analysis was performed to analyze the efficacy of ESPB for postoperative analgesia in patients undergoing LSS. **Methods:** We conducted independent and duplicate electronic database searches including PubMed, Embase and Cochrane Library till June 2023 for randomized controlled trials (RCTs) analyzing the efficacy of bilateral ESPB for postoperative pain relief in lumbar spine surgeries. Post-operative pain scores, total analgesic consumption,

first analgesic requirement time, length of stay and complications were the outcomes evaluated. Statistical analysis was performed using STATA 17 software. **Results:** 32 RCTs including 1464 patients (ESPB/Control = 1077/1069) were included in the analysis. There was a significant pain relief in ESPB group, as compared to placebo across all timelines such as during immediate post-operative period ( $p < 0.001$ ), 4 hours ( $p < 0.001$ ), 8 hours ( $p < 0.001$ ), 12 hours ( $p < 0.001$ ), 24 hours ( $p = 0.001$ ) post-surgery. Similarly, ESPB group showed a significant reduction in analgesic requirement at 8 hours ( $p < 0.001$ ), 12 hours ( $p = 0.001$ ), and 24 hours ( $p < 0.001$ ). However, no difference was noted in the first analgesic requirement time, time to ambulate or total length of stay in the hospital. ESPB demonstrated significantly improved overall satisfaction score for the analgesic management ( $p < 0.001$ ), reduced intensive care stay ( $p < 0.05$ ) with significantly reduced post-operative nausea and vomiting ( $p < 0.001$ ) compared to controls. **Conclusion:** ESPB offers prolonged post-operative pain relief compared to controls, thereby reducing the need for opioid consumption and its related complications.

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### **P431: A comparison of interferential current efficacy in elderly intervertebral disc degeneration patients with or without sarcopenia: a retrospective study**

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**Introduction:** Intervertebral disc degeneration and sarcopenia are both age-related diseases without effective treatments. Their comorbidities may worsen the prognosis, and further studies on interaction and therapy are needed. Evidence suggests that IDD patients and patients with muscle atrophy or skeletal muscle dysfunction achieved good results after interferential currents (IFC) electrical stimulation, which decreases skin impedance to reach deep muscle tissue without increasing the patient's discomfort, and is effective in increasing neuromuscular excitability, relieving inflammation, eliminating edema, reducing nerve or muscle pain, promoting nerve regeneration, enhancing muscle strength, and improving physical mobility. Despite the growing popularity of IFC therapy in various clinical settings, there have been few studies on its efficacy on intervertebral disc degeneration with sarcopenia patients. The purpose of the study was to investigate the prevalence of sarcopenia in intervertebral disc degeneration, and to compare the characteristics of intervertebral disc degeneration with sarcopenia and without sarcopenia and effects of interferential current. **Material and Methods:** One hundred and twenty disc