

## C.7

**Does gender equality exist in the surgical management of degenerative lumbar disease?**

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**Background:** Despite efforts toward gender equality in clinical trial enrollment, females are frequently underrepresented and gender-specific data analysis is often unavailable. The purpose of this study was to determine if gender equality exists in the management of degenerative lumbar disease. **Methods:** Part 1: A systematic scoping review was conducted according to PRISMA guidelines, in order to synthesize the adult surgical literature regarding gender differences in pre- and post-operative clinical assessment scores for patients diagnosed with degenerative lumbar disease.

Part 2: An ambispective cohort analysis (multi-variate logistic regression) of the Canadian Spine Outcomes Research Network registry was performed to address knowledge gaps identified in "Part 1". **Results:** Part 1: Thirty articles were identified, accounting for 32,951 patients. Female patients have worse absolute pre-operative pain, disability and health-related quality-of-life (HRQoL). Following surgery, females have worse absolute pain, disability, and HRQoL, but demonstrate an equal or greater interval change compared to males.

Part 2: Data was analyzed for 5,039 patients. Significant gender differences in pre-operative utilization of healthcare resources (medication use, diagnostic testing, medical and allied healthcare professional visits) were identified. **Conclusions:** Significant gender disparities in clinical assessment scores and the pre-operative utilization of healthcare resources were identified for patients undergoing surgery for degenerative lumbar disease.

## POSTER PRESENTATIONS

### ADULT NEUROLOGY (CNS)

#### AUTOIMMUNE ENCEPHALITIS

##### P.002

#### Successful Treatment of Supra-Refractory Status Epilepticus Secondary to Anti-N-Methyl-D- Aspartate Receptor Encephalitis With Electroconvulsive Therapy

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**Background:** Anti-N-Methyl-D-Aspartate (NMDA) receptor encephalitis is an autoimmune disease associated with antibodies against heteromers NR1 and NR2 subunits of the cell surface of the NMDA receptors, causing many psychiatric and neurological symptoms. This includes new-onset refractory status epilepticus. **Methods:** A 33-year-old previously healthy female developed new-onset refractory status epilepticus caused by anti- NMDA receptor encephalitis without the presence of tumours. **Results:** The clinical course was complicated by prolonged status epilepticus, which was refractory to many antiepileptic drugs (levetiracetam, phenytoin, carbamazepine, topiramate, lacosamide, valproic acid), ketamine, propofol, midazolam, including inhalation agents (isoflurane). Also, she received first (intravenous immunoglobulin, intravenous methylprednisolone, and plasmapheresis), second-line immunotherapy (rituximab) and prophylaxis bilateral oophorectomy without clinical or electrographic improvement. However, the patient drug-resistant status epilepticus markedly improved both clinically and electrographically following seven sessions of electroconvulsive therapy. **Conclusions:** Electroconvulsive therapy should be considered as adjuvant

therapy for the treatment of immunotherapy resistant encephalitis.

##### P.003

#### Autoimmune Encephalitis and related disorders are not rare in British Columbia

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**Background:** Autoimmune encephalitis (AE) is a recently described entity that presents with seizures, neuropsychiatric manifestations, and movement disorders. This observational chart review of AE aims to assess the burden of AE and related disorders at two Vancouver academic medical centers. **Methods:** All patients with Mitogen Laboratory AE antibody testing in 2018 were identified. Electronic hospital records were used to determine patient characteristics. **Results:** 1266 unique tests were ordered on 315 inpatients and outpatients. Of 37/315 (11.7%) seropositive patients, 26/37 (70.2%) patients had clinical data. Seropositive results included autoantibodies to NMDA (n=3), LG1 (n=2), CASPR2 (n=1) and paraneoplastic autoantibodies included GAD65 (n=2), PNMA2 (n=5), recoverin (n=3). There were four AE cases in 14 seronegative patients based on discharge diagnosis. 15/30 of patients had seizures and three developed status epilepticus. 15 had neuropsychiatric manifestations. 14 had a movement disorder. For inpatients, average length of stay was 24.3 days and there were 5 intensive care unit (ICU) admissions. Immunotherapies used included corticosteroids, PLEX, rituximab, IVIg, and cyclophosphamide. **Conclusions:** In two hospitals serving approximately two million people in 2018, there were 30 cases of AE in 2018. AE presents with a