

Interventions codes, laminectomies (ISC80) and discectomies (ISE87) demonstrated the highest ED visit rates. Comprehensive chart reviews were conducted identifying surgical and medical reasons for presentation within this timeframe. Results: Reviewing a cohort of 2165 post-decompression patients, 42.1% presented to the ED (n=912) with 62.8% of these directly related to surgery. Primary reasons included wound care (31.6%), pain management (31.6%), and bladder issues (retention or UTI, 11.0%). Simple wound evaluation constituted 49.7% of

wound-related visits, with surgical site infection 37.6% and dehiscence 6.6% accounting for the remainder. Pain-related presentations resulted in 72.3% discharge with additional medications, and 27.7% necessitating hospital admission. New or worsening neurologic deficits were reported in 8.9% of ED visits. Conclusions: These findings illuminate crucial aspects of post-operative care and ED utilization patterns. Prioritizing patient education, pain management, and wound care could help alleviate the national ED crisis.

## POSTER PRESENTATIONS

### ADULT NEUROLOGY (CNS/CSC)

#### DEMENTIA AND COGNITIVE DISORDERS

##### P.001

#### Planning & decision-making in obsessive-compulsive disorder (OCD) through the lens of ERP: a comparative analysis

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Background: This study aimed to investigate the effect of impulsivity on the planning & decision-making of individuals with OCD compared to a control group, focusing on amplitude and latency during the Tower of London (TOL) task. Methods: A sample of a total of 76 (dominantly right-handed & aged between 18-30 yrs) participated. Participants with OCD were assessed with the Y-BOCS & symptom checklist, BIS-11, and the HCs were screened with the GHQ-12. ERP components were measured by using TOL on E-prime 3.0. The amplitude and latency along with the spectral power for each problem-solving task were measured and analyzed. Results: Statistically significant differences were found in the Latency variable in the left frontal area of the brain, indicating distinctive latency patterns in individuals with OCD compared to controls. No statistically significant differences were observed in amplitude or latency for other move sequences. High spectral activity was detected in individuals with OCD for an extended period. Conclusions: Individuals with OCD exhibit higher activity indicative of ambivalence during decision-making which indicates that to overcome impulsive urges, thus they need to put more cognitive effort to maintain the same outcomes. To maintain error-free results obsessive & compulsive behaviors are a necessary evil.

##### P.002

#### Distinct neuropsychiatric symptom trajectories in frontotemporal dementia across genetic mutations

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Background: Frontotemporal dementia (FTD) often presents with varying neuropsychiatric symptoms (NPS), which may differ based on genetic mutations. We hypothesized distinct NPS trajectories in FTD progression among carriers of chromosome 9 open reading frame 72 (C9orf72), progranulin (GRN), and microtubule-associated protein tau (MAPT) mutations. Methods: We analyzed 1662 participants from ALLFTD, including 342 C9orf72, 148 GRN, 168 MAPT mutation carriers, and 1004 noncarriers. We categorized participants into four stages based on CDR plus NACC FTLD global scores: 1) Presymptomatic (consistent CDR=0), 2) Early conversion (CDR increasing from 0 to 0.5), 3) Advanced conversion (CDR increasing from 0.5 to  $\geq 1.0$ ), and 4) Symptomatic (CDR $>1.0$ ). The Neuropsychiatric Inventory-Questionnaire (NPI-Q) assessed NPS changes, analyzed using a mixed-effects model, accounting for age and baseline scores. Results: Our results indicated similar NPS trajectories in the presymptomatic stage for all groups. Notably, during early conversion, C9orf72 and GRN carriers exhibited significantly higher NPI-Q score increases than MAPT carriers, primarily in psychosis and hyperactivity domains. In later stages, increases in NPS were similar across groups. Conclusions: This study suggests familial FTD progression, particularly in TDP-43 pathology, may involve more severe NPS like psychosis or hyperactivity,