**Neuropsychiatric Impact of Corticosteroid Injections**

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**Purpose**

Identify the presence of neuropsychiatric symptoms in chronic pain patients receiving corticosteroid injections more often than every three months compared to those receiving them less often. Evaluate the benefit to pain and activity levels based on frequency of corticosteroid injections.

**Description**

Anxiety & Depression Screening: electronic behavioral health assessment tool
- GAD-7: anxiety scoring
  - Mild
  - Moderate
  - Severe
- CES-D: depression scoring
  - 0-11: minimal
  - 12-19: moderate
  - 20-26: severe
- Symptom Groups: out of a possible score of 40
  - SADNESS
  - Lack of interest/pleasure
  - Sleep disturbance
  - Thinking/Concentration

Pain & Activity

- Indiana Polyclinic Combined Pain and Function Scales

Corticosteroid Injections: within the last year
- One injection: 1-pg, synringe
  - 0.5% Celestone (long-acting corticosteroid Bemethasone)
  - 0.5% lidocaine
  - using Celestone maximum per single visit

**Theoretical Framework**

Iowa Model of Research-Based Practice to Promote Quality Care

Clinician guide for the evidence-based process:
- Evaluate for practice change
- Incorporate research findings into patient-centered care

**Implications for Practice & Recommendations**

No evidence of a difference in neuropsychiatric symptoms between CSI groups.

Future studies needed to study the relationship between CSI frequency and neuropsychiatric symptoms.

No evidence of a significant improvement in pain and activity levels between CSI groups.

Given systemic side effects associated with corticosteroid use, providers should consider limiting this therapy to meet the recommended interval of three months between joint injections.

**Results**

**Participant Demographics**

Sample Size = 55, Average Age = 62

- 29 frequent (injections) more than every three months
- 26 less frequent (injections) every three months or less

**Graph 1. CSI Over One Year**

- Data provides no evidence that there is a difference in neuropsychiatric symptoms between frequent and less frequent CSI groups.

**Graph 2. Depression & Anxiety Screening**

- Data provides no evidence that there is a correlation between total corticosteroid dose and neuropsychiatric symptoms.

- Data provides no evidence that there is a difference in pain or activity scores between frequent and less frequent CSI groups.