E-Poster

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The Burden of Respiratory Morbidity and Multimorbidity Associated With Chronic Opioid Use Among Adults With Cerebral Palsy

Topic: Health Conditions (Nervous System, Musculoskeletal System, Cardiopulmonary System)

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BACKGROUND

Chronic pain is one of the most commonly reported physical symptom of cerebral palsy (CP), and many people are prescribed opioids as a primary intervention for symptom management. The objective of this study was to examine the association between opioid exposure and risk of developing disorders of the respiratory system among adults with CP, and to determine if there are differences by co-occurring intellectual and developmental disabilities.

METHODS

Cross-sectional cohort from a nation-wide Medicare insurance claims database. Federally-insured beneficiaries were included if they had an ICD-9-CM/ICD-10-CM diagnosis code for CP (n = 41,359). Disorders of the respiratory system were examined for the entire cohort, as well as between individuals with and without opioid exposure and co-occurring intellectual and developmental disabilities (IDDs).

RESULTS

The prevalence of any respiratory disorder was significantly higher among individuals exposed to opioids (61.6% *vs.* 37.2% $p < 0.001$), as well as across individual disorders and multimorbidity, including for: pneumonia (34.3% *vs.* 17.8% $p < 0.001$), chronic lower respiratory diseases (38.5% vs. 21.6% $p < 0.001$), lung diseases due to external agents (19.2% *vs.* 9.7% $p < 0.001$), other respiratory diseases principally affecting the interstitium (7.2% *vs.* 2.1% $p < 0.001$), other diseases of the pleura (17.3% *vs.* 6.1% $p < 0.001$), other diseases of the respiratory system (39.5% *vs.* 18.6% $p < 0.001$) and respiratory multimorbidity (40.0% *vs.* 18.8% $p < 0.001$, $p < 0.001$). Fully adjusted models demonstrated a robust association between opioid exposure and any (OR: 2.53; 95% CI: 2.42, 2.64), all (OR range 2.12-2.95; all $p < 0.001$) individual respiratory morbidity, and respiratory multimorbidity (OR: 2.70; 95% CI: 2.57, 2.83).

CONCLUSION

Adults with CP have a high prescription prevalence of chronic pain and opioid exposure, and this is robustly associated with disorders of the respiratory system and respiratory multimorbidity.

Statement of Disclosures

Not applicable

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