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The Relationship Between Gastroesophageal Reflux and Constipation

Intro

Gastroesophageal reflux (R) and constipation (C) are two of the most common indications for children to seek care. Establishing their coexistence may result in recommendations to modify clinical practice.

Methods

TriNetX, a worldwide database of >100 million patients from >80 healthcare organizations, contains >20 million patients with C and >10 million with R. Patients with C (C+) were defined by ICD diagnoses or documented laxative use. Patients with R (R+) were defined by ICD diagnoses. Patients who were R+ or had documentation of acid suppression therapy were also analyzed (RA+).

The total population was divided into C+ or C-. It was also divided into R+ or R- and also into RA+ or RA-

Prevalence rates were determined for each pair of clinical subgroups. The ratio of prevalence rates was defined as associated risk. Specifically:

-Among those w/ reflux, the proportion who also had constipation $[(C+R+)/R+]$

-Among those w/o reflux, the proportion who had constipation $[(C+R-)/R-]$

-Among those w/ constipation, the proportion who also had reflux $[(R+C+)/C+]$

-Among those w/o constipation, the proportion who had reflux $[(R+C-)/C-]$

-Among those w/ constipation, how many had either a diagnosis of reflux OR received acid suppression $[(RA+C+)/C+]$

-Among those w/o constipation, how many had either a diagnosis of reflux OR received acid suppression $[(RA+C-)/C-]$

The associations were examined over the entire patient population to determine if any associations were unique to children.

Results

C (22.4%) and R (10.8%) were common diagnoses. Each was noted about 4 to 7 times more frequently in patients diagnosed with the other. For constipated children, likelihood of receiving acid suppression was more pronounced compared to those with normal bowel habits.

Conclusion

C and R often coexist from early childhood through adolescence. For children with one, recognizing and treating the other can reduce pain and improve quality of life.