

ABSTRACT SUBMISSION FORM

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SEX + GENDER

Exploring the role of sex and gender on health research



CHR D 2020: Abstract Submission Form

Submitter Name

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Title

Respiratory outcomes in the first ten years-of-life in children with gastroschisis: a retrospective cohort study

Background

Despite evidence that the gastrointestinal system and immune system are interconnected, little attention has been given to the long-term respiratory outcomes of children born with gastroschisis.

Objective

The objective of this study was to determine if gastroschisis survivors have more respiratory illnesses in their first 10 years-of-life compared to age-matched controls.

Methods

We performed a retrospective cohort study of gastroschisis children born between 1991-2017. Gastroschisis cases were identified from Winnipeg's Surgical Database of Outcomes and Management, and a 10:1 date-of-birth matched control population was selected using the Manitoba Centre for Health Policy data repository. International Classification of Disease codes were used to compare the respiratory diagnoses for children born with gastroschisis to date-of-birth matched controls in the first 10 years-of-life. A propensity analysis was used to control for the possible confounding effects of socioeconomic status and sex.

Results

The 0-5 years-of-age analysis included 117 gastroschisis cases and 1205 date-of-birth matched controls. Children with gastroschisis 0-5 years-of-age were found to have a higher risk of acute sinusitis ($p=0.025$), acute tonsillitis ($p=0.001$), acute bronchitis/bronchiolitis ($p<0.001$), pneumonia ($p<0.001$), viral pneumonia ($p=0.007$), and pneumonia due to unspecified organism ($p<0.001$). Gastroschisis children 0-5 years-of-age were also found to be diagnosed with bronchitis/bronchiolitis ($p<0.001$), and viral pneumonia ($p<0.001$) more frequently. The 5-10 years-of-age analysis included 73 cases and 738 controls. No difference in the risk of respiratory illness was found for gastroschisis cases and controls 5-10 years-of-age. However, gastroschisis cases were more frequently diagnosed with acute upper respiratory infections ($p=0.005$),

bacterial pneumonia ($p < 0.001$), and influenza ($p < 0.001$).

Conclusion

Our study shows that children with gastroschisis have an increased risk for asthma and respiratory infections compared to children without gastroschisis, most noticeably in the first 5 years-of-life.

Theme:

Clinical

Do you have a table/figure to upload?

No

Are you willing to participate in Goodbear's Den?

Yes

Presenter Status:

Non-Trainee

What was your role in the project?

Write Abstract

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