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CMAJ headlines:

- **Teens whose mothers had an abortion are more likely to undergo abortion**
- **Congenital hernias in newborns: new guideline to manage complex condition**

Teens whose mothers had an abortion are more likely to undergo abortion

Teens whose mothers had abortions were more likely to also have abortions, according to new research in *CMAJ (Canadian Medical Association Journal)*.

In developed countries, approximately 6.7 million abortions are performed every year, with a large proportion performed on teens aged 19 years or younger. In Canada, the teen pregnancy rate is 28 per 1000, with more than 50% of these ending in abortion.

“Research shows there is an association between mothers and daughters in the timing of a first pregnancy ending in a live birth,” say Dr. Joel Ray and Ms. Ning Liu, the Institute for Clinical Evaluative Sciences and St. Michael’s Hospital, Toronto, Ontario. “We wanted to see whether the same tendency exists for pregnancies ending in an induced abortion.”

The large study included data on 431 623 daughters born in Ontario obtained from the Institute for Clinical Evaluative Sciences (ICES) and linked to other databases that provided information on mother-daughter pairs. There were 73 518 daughters whose mothers had had at least one abortion (exposed group) and 358 105 daughters whose mothers had none (unexposed group). In the exposed group, the probability of having an abortion during their teenage years was 10.1%, compared with 4.2% in the unexposed group. As the majority of those abortions (94.5%) occurred before 15 weeks gestation, it’s unlikely that the reason was a genetic or birth defect in the fetus in most cases and it may be reasonable to assume social indications.

There was also a dose-response effect: the greater number of abortions in the mother, the greater the number of abortions in her teenage daughter.

“We don’t know what factors cause this association, as it was beyond the scope of our study,” says Ning Liu. “Previous studies have found a higher likelihood of teen abortion if a young woman has greater social challenges, including poor school performance,

separation from a biological parent, lower parental education, and receipt of income support."

"Further research is needed to determine if strategies that engage parents could reduce unprotected sex in teens, as well as to understand the major factors that contribute not only to teen pregnancy, but also to the decision to have an abortion or maintain a pregnancy," says Dr. Ray. "Whatever the pregnancy outcome, the need to advocate for the health of a young woman is paramount."

Study limitations include a lack of information on the fathers, the marital status and education levels of both mother and daughter, or family dynamics and attitudes.

"Intergenerational abortion tendency between mothers and teenage daughters: a population-based cohort study" is published January 29, 2018.

MEDIA NOTE: Please use the following public links after the embargo lift:

Research: http://www.cmaj.ca/lookup/doi/10.1503/cmaj.170595

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Management of diaphragmatic hernia in infants and children is complex and variable: new Canadian guideline aims to standardize care

Podcast pre-embargo link: https://soundcloud.com/cmajpodcasts/170206-guide/s-q1JQh

For babies diagnosed with congenital diaphragmatic hernia, a comprehensive new guideline in *CMAJ (Canadian Medical Association Journal)* aims to provide guidance to physicians in diagnosing and managing the condition from the time a diagnosis is made during pregnancy through the teen years.

Congenital diaphragmatic hernia is a "hole" in the diaphragm muscle through which the intestines can move into the chest, thereby causing serious problems including death. Improvements in neonatal care have improved survival rates of these babies from 50% to 80% in the last 30 years, but survivors can experience significant long-term health issues that affect feeding, growth and brain development as well as the lungs, heart and thoracic cage.

The guideline was created to provide standardized management through three phases: prenatal, postnatal and childhood/teen stages of life. The condition requires the expertise of a variety of specialists in addition to primary care physicians. The lack of "best practices" on how to manage this complex condition leads to significant variability in care across Canada.

"We saw this as an opportunity to improve outcomes for children with congenital diaphragmatic hernia by standardizing care across Canada," says Dr. Pramod Puligandla, Montreal Children's Hospital, Montreal, Quebec, and the project lead of the Canadian Congenital Diaphragmatic Hernia Collaborative that developed the guideline. "We hope this evidence-based guideline will be useful to all clinicians involved in the care of these infants."

The authors consulted existing recommendations before creating their own and note that the new Canadian guidelines are more in-depth than the guidelines from Europe. The new guidelines also cover all aspects of care for congenital diaphragmatic hernia rather than specific lung problems, which recent guidelines from the American Heart Association/American Thoracic Society focus on.

A key recommendation from the Canadian guidelines is long-term observation and management.

"Long-term disability surveillance is essential, especially in high-risk patients, and should be managed by interdisciplinary teams of primary care physicians, pediatricians, pediatric subspecialists, pediatric surgeons and other allied health professionals," the authors conclude.

"*Diagnosis and management of congenital diaphragmatic hernia: a clinical practice guideline*" is published January 29, 2018.

MEDIA NOTE: Please use the following public links after the embargo lift:

Guideline: http://www.cmaj.ca/lookup/doi/10.1503/cmaj.170206

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