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***CMAJ* headlines:**

- **Fat mass index, not BMI, associated with cardiovascular risk**
- **Opioids: injectable opioid agonist guideline**
- **Opioid use disorder in pregnancy: five things to know**

Fat mass index, not BMI, associated with cardiovascular events in people with diabetes

In people with diabetes, fat mass index, not body mass index (BMI), is associated with a higher risk of cardiovascular events, according to new research in *CMAJ (Canadian Medical Association Journal)*.

Heart disease is a major cause of death worldwide, and obesity is a major risk factor. Body mass index, a common measure of obesity, has been recently shown to be an imperfect metric because it does not distinguish between lean muscle mass and fat mass. When issues related to obesity are studied, suitable metrics that describe obesity accurately are extremely important.

Researchers analyzed data on 10 251 adults from the ACCORD study, a randomized controlled trial in the United States looking at diabetes and cardiovascular disease (CVD). The mean age was almost 63 years, and 62% of participants were men. The researchers found that people with type 2 diabetes and higher fat mass were at increased risk of major cardiovascular events compared to people with lower fat mass. In contrast to previous research, the protective role of lean body mass was not observed in the research population with type 2 diabetes as a whole.

“We found that the protective effect of lean body mass was observed in participants with a lean BMI of less than 16.7 kg/m^2,” writes Dr. Xinqun Hu, Departments of Cardiovascular Medicine and Emergency Medicine, The Second Xiangya Hospital, Changsha, Hunan, China, with coauthors. “The increased risk of CVD in [type 2 diabetes mellitis] patients with lower BMI may be attributed to the adverse effect of lower lean body mass that overrides the positive effect of lower fat mass.”

“*Association of Predicted Lean Body Mass and Fat Mass with Cardiovascular Events in Patients with Type 2 Diabetes Mellitus*” is published September 23, 2019.

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

Research: http://www.cmaj.ca/lookup/doi/10.1503/cmaj.190124

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New national guideline sets out best practices for delivering injectable opioid agonist treatment

A new Canadian guideline lays out the optimal strategies for providing injectable opioid agonist treatment with prescription heroin and hydromorphone for people with severe opioid use disorder. The clinical guideline was created for a wide range of health care providers to address an urgent need for evidence-based treatment of opioid use causing overdose and death, and is published in *CMAJ (Canadian Medical Association Journal)*.

In 2018, of the 4,460 Canadians who died from opioid overdoses, 94% were accidental deaths, a 9% increase from 2017 and a 48% increase from 2016. This guideline will support health care providers to deliver life-saving prescription treatments for opioid addiction, which may prevent overdoses.

“Opioid use disorder is a public health emergency nationwide; unfortunately, resources for the treatment of opioid addiction have been scarce and guidelines outlining best practices for innovative treatments have been lacking. This guideline is a blueprint for health practitioners to step up and provide evidence-based care,” says Dr. Nadia Fairbairn, British Columbia Centre on Substance Use and the University of British Columbia, Vancouver, BC.

Oral opioid agonist treatments are the most effective approach to reducing death in people using opioids, although many do not benefit from this therapy because of opioid cravings, inability to achieve an effective dose, adverse reactions or contraindications, and ongoing injection drug use.

Evidence included in the guideline demonstrates that injectable opioid agonist treatment with prescription heroin (known as diacetylmorphine) and hydromorphone is an evidence-based, cost-effective treatment for individuals with severe opioid use disorder who have not benefitted from these other treatments and continue to face high risk of harms related to injection opioid use. The writing committee, led by the Canadian Institutes of Health Research’s Canadian Research Initiative in Substance Misuse (CRISM), included health care practitioners from across the country with broad experience, and people with opioid use disorder experience. The three key clinical recommendations were determined using the GRADE approach.

Key recommendations:

- Injectable opioid agonist treatment should be considered for people with severe opioid addiction who do not respond to oral treatments, as well as for people who actively use illicit injectable opioids.

- Diacetylmorphine and hydromorphone, two injectable opioid agonist therapies, are recommended as options for patients likely to benefit from injectable opioid agonist treatment, with the decision of which treatment to use made based on availability, patient choice and the judgment of the prescriber.

- As assigning an end date to treatment is associated with a return to illicit opioid use, injectable opioid agonist treatments should be prescribed on an open-ended basis, and the decision to transition to another treatment should be made in collaboratively with the patient.

The guideline also includes expert opinion on clinical care approaches, including who is eligible for this treatment, doses and missed doses. Patient values and preferences were considered in the development of the recommendations.

“Offering injectable opioid treatments is an effective way for clinicians to address the toxicity of the fentanyl-adulterated drug supply and help people achieve stability so they can focus on other aspects of their lives to get well, such as housing, employment, and connecting with family,” says Dr. Christy Sutherland, Medical Director of PHS Community Services Society in Vancouver, BC.

In addition to the clinical guideline published in *CMAJ*, CRISM also released operational guidance for delivering injectable opioid agonist therapy.

Read two related articles

- “Opioid Use Disorder in Pregnancy: Five Things to Know”
- A Humanities article, “Lessons from a Naloxone Kit”

“*Injectable Opioid Agonist Treatment for Opioid Use Disorder: A National Clinical Guideline*” is published September 23, 2019.

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

Guideline: http://www.cmaj.ca/lookup/doi/10.1503/cmaj.190344

Podcast post-embargo link: https://soundcloud.com/cmajpodcasts/190344-guide

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Opioid use disorder in pregnancy: five things to know

Opioid use is increasing in pregnancy as well as the general population. A “Five things to know about …” practice article on opioid disuse in pregnancy in *CMAJ (Canadian Medical Association Journal)* provides information on how to manage this vulnerable population.

1. Opioid use and opioid use disorders in pregnancy are rising.

2. Guidelines support universal screening for drug use, including opioids, by prenatal care providers.

3. Opioid agonist therapy is the standard of care for opioid use disorders in pregnancy, along with counselling and mental health supports. Pregnant women with an opioid use disorder should be offered timely access to opioid agonist therapy.

4. Neonatal opioid withdrawal syndrome is best managed by keeping mothers and infants together after delivery. Breastfeeding should be encouraged in women who are stable on opioid agonist therapy, for whom there are no concerns about ongoing drug use.

5. Ongoing support in the postpartum period is essential, as women with opioid use disorders are at increased risk of fatal overdose in the first year postpartum.

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