HIGHLIGHTS

Delay to neuroimaging in patients with suspected acute stroke

Timely access to diagnostic neuroimaging is critical to the management of patients with suspected acute ischemic stroke. Thrombolysis with intravenous tissue plasminogen activator can reduce the risk of disability after stroke, but it must be administered within 4.5 hours after stroke onset and be preceded by brain imaging to confirm eligibility for the treatment. This prospective cohort study included all adults with suspected acute stroke (n = 13 250) seen at hospitals with neuroimaging capacity within the Ontario Stroke Registry over 1-year (2010–2011). Of the 3984 who arrived within 4 hours after symptom onset, 1087 (27.3%) had timely neuroimaging. The factors independently associated with an increased likelihood of timely neuroimaging were less time from symptom onset to presentation, more severe stroke, male sex, no history of stroke or transient ischemic attack, arrival to hospital from a setting other than home. and presentation to a designated stroke centre or an urban hospital (Table 1). Some of these factors are potentially modifiable. The authors conclude that quality-improvement initiatives are urgently needed to increase the number of patients with acute stroke who receive appropriate revascularization therapy. ***CMAJ Open* 2016;4:E331-7.**

Table 1: Factors associated with timely receipt of neuroimaging among patients with suspected acute stroke who presented within 4 hours after symptom onset

Factor	Hazard ratio (95% CI)
Presentation	
Outside business hours	1.07 (0.94–1.22)
Arrived to hospital from (v. from home)	
Nursing, retirement home or complex continuing care	1.21 (0.94–1.56)
Other	1.90 (0.77–4.67)
Hospital	
Type (v. nondesignated hospital)	
Regional stroke centre	5.60 (2.70–11.62)
District stroke centre	6.78 (3.66–12.56)
Rural location (v. urban)	0.08 (0.02–0.36)
Annual stroke volume (v. high)	
Medium (101–200)	1.06 (0.54–2.05)
Low (≤ 00)	2.73 (1.00–7.47)

Note: CI = confidence interval.

Weight gain in pregnancy

Inadequate or excessive weight gain during pregnancy increases the risk of adverse outcomes for the woman and her baby. This study describes patterns and trajectories of total and rate of gestational weight gain in a prospective cohort of 1541 pregnant women and adolescents in the Alberta Pregnancy Outcomes and Nutrition study. Nearly half the participants (n = 761) exceeded Health Canada's guidelines for total gestational weight gain, whereas 272 (17.6%) gained less weight than recommended. In those characterized as overweight or obese, 53 (16.2%) and 27 (16.8%), respectively, exceeded the upper limit by at least 10 kg. The median weight gain for participants in the normal, overweight and obese categories had exceeded recommended upper limits by about 30, 20 and 18 weeks' gestation, respectively. In particular, 95 participants (30.3%) in the overweight group and 59 (39.6%) in the obese group gained weight at more than double the recommended rate between the second and third trimesters (Figure 1). The authors suggest that these findings reinforce Health Canada's recommendations that gestational weight gain be discussed early with all pregnant patients, but that messages may need to be tailored for those in different prepregnancy weight categories. ***CMAJ Open* 2016;4:E338-45.**

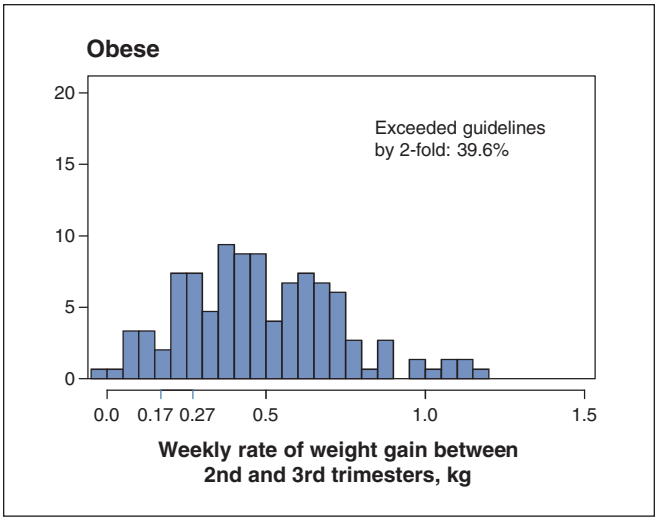

Figure 1: Weekly rate of weight gain between the second and third trimesters by prepregnancy body mass index category among participants in the Alberta Pregnancy Outcomes and Nutrition study. The rate of weight gain is shown in 0.05-kg blocks. The blue ticks on the x axis indicate the recommended lower and upper limits for weekly rate of weight gain according to Health Canada's guidelines.

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