RESEARCH IN CMAJ OPEN

HIGHLIGHTS

Operative versus nonoperative interventions for fractures of the clavicle

There has been a growing trend in treating closed displaced midshaft fractures of the clavicle operatively, rather than with the previous standard of nonoperative treatment. However, the

optimal treatment for this common fracture type is still an issue of debate. In this meta-analysis, the authors included 15 randomized controlled trials, with 9 trials comparing operative and nonoperative interventions, 5 comparing different implants used in operative treatment, and 1 comparing nonoperative therapies. Nonoperative treatments did not differ from operative approaches in risk of secondary operation (risk ratio [RR] 1.16, 95% confidence interval [CI] 0.58-2.35) or all complications (RR 0.90, 95% CI 0.55-1.50) (Figure 1). Regardless of treatment type, however, complication rates were high, with 1 in 4 patients experiencing a complication. There was modest functional improvement at 1 year in the operative group, but this difference was clinically unimportant. The authors conclude that current evidence does not support the routine use of internal fixation for treating displaced midshaft clavicle fractures. *CMAJ Open* 2015;3:E396-405.

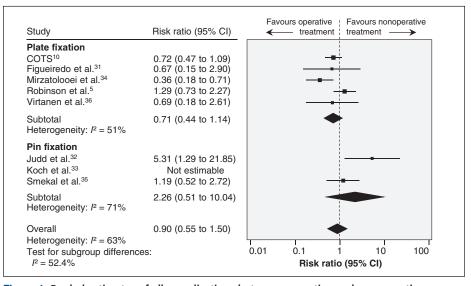


Figure 1: Pooled estimates of all complications between operative and nonoperative groups. Values less than 1.0 favour operative treatment. Note: The *N* values in the study by Figueiredo et al. (24 operative, 16 nonoperative) are the numbers who completed the study and not the numbers initially randomized. CI = confidence interval.

Medicinal and nonmedicinal substance abuse in Canadian teens

Abuse of prescription and over-the-counter medicines is prevalent in Canada, but we know little about the patterns of abuse in young people. The authors of this cross-sectional study used nationally representative data from Health Canada's 2012–2013 Youth Smoking Survey (n = 38 667) to examine abuse of medicinal and nonmedicinal substances in children in grades 7–12. Nearly 1 in 4 (23.0%) had abused at least 1 medicinal or nonmedicinal substance in the previous year, with 3.6% reporting concurrent abuse of both substance types. About 5% of youth reported abusing medicinal substances: the most widely abused medicines were dextromethorphan (2.9%), pain medications (2.6%), sleeping medications (1.8%), stimulants (1.7%)and sedatives (1.0%) (Figure 2). Abuse of nonmedicinal substances (not including alcohol and tobacco) was much higher, with 20.4% of girls and 22.1% of boys abusing substances such as marijuana (20.7%) and hallucinogens (2.4%). At each grade level, girls were more likely to abuse medicinal substances. CMAJ Open 2015;3:E387-94.

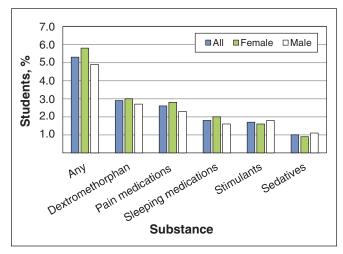


Figure 2: Abuse of medicinal substances in the previous 12 months among youth in grades 7 to 12 (n = 38 667).

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