Re-assessment of occurrence of Inflammatory Bowel Disease in Trail: A Medical Health Officer summary of the BC Centre for Disease Control 2018 study

In follow up to the 2013 study, which looked at rates of Inflammatory Bowel Disease (IBD) in Trail from 2007-2011, a more detailed analysis inclusive of records from 2003-2015 was completed by the BCCDC in 2018.

Data sources and noted differences in 2018 and 2013 studies:

Data sources included physician visits (MSP claims for IBD per 10 000 MSP registrants); hospitalisations (persons discharged from hospital with principal diagnosis of IBD/ 10 000 MSP registrants); and drug dispensations (persons to whom IBD-related drugs were dispensed per 10 000 MSP registrants). The original analysis was limited to individual records, while this review was able to link records by using disguised personal identifiers. The diagnostic codes differed between the two analyses.

New data looked at in 2018 was able to assess IBD rates across geographic zones within Trail and incident (new) severe cases of IBD by age, sex and period of time.

Overall findings:

The 2018 study was able to demonstrate that the 2013 conclusion of higher levels of IBD related doctor visits and hospitalizations was largely related to the use of a non-specific diagnosis "other and unspecified noninfectious gastroenteritis and colitis".

From 2010-2015 there is a clearly higher rate of doctor visits among Trail residents for Crohn's disease, compared to the IH average rates. The onset of Crohn's disease has occurred at a younger age in Trail than elsewhere in IH. Rates of ulcerative colitis are comparable to that in the rest of IH.

This study is unable to associate the higher rates of Crohn's disease with any specific cause. Multiple factors may be at play, including smoking, diet, and the use of certain medications. There are no known associations of IBD with lead or metal dust.

Limitations of study:

Limitations of the study are that the study used administrative data, which can be subject to bias based on diagnostic and prescribing practices. The data cannot take into account genetics/family relationships, work status or individual practices (eg smoking) as risk factors. The population of Trail is relatively small, so numbers of hospitalizations are very small.

Next steps:

The BCCDC will undertake further analysis of the available administrative data on IBD in Trail. We will consider future opportunities to follow and investigate the Crohn's disease rates in this community, given that this most recent (2010-2015) analysis iindicates that this illness is occurring at higher rates and with earlier age of onset of severe disease than elsewhere in IH.

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