

Risk of Cervical Dysplasia/Cancer in patients with Inflammatory bowel disease on Immunosuppressants - A Systematic Review and Meta-Analysis

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Introduction

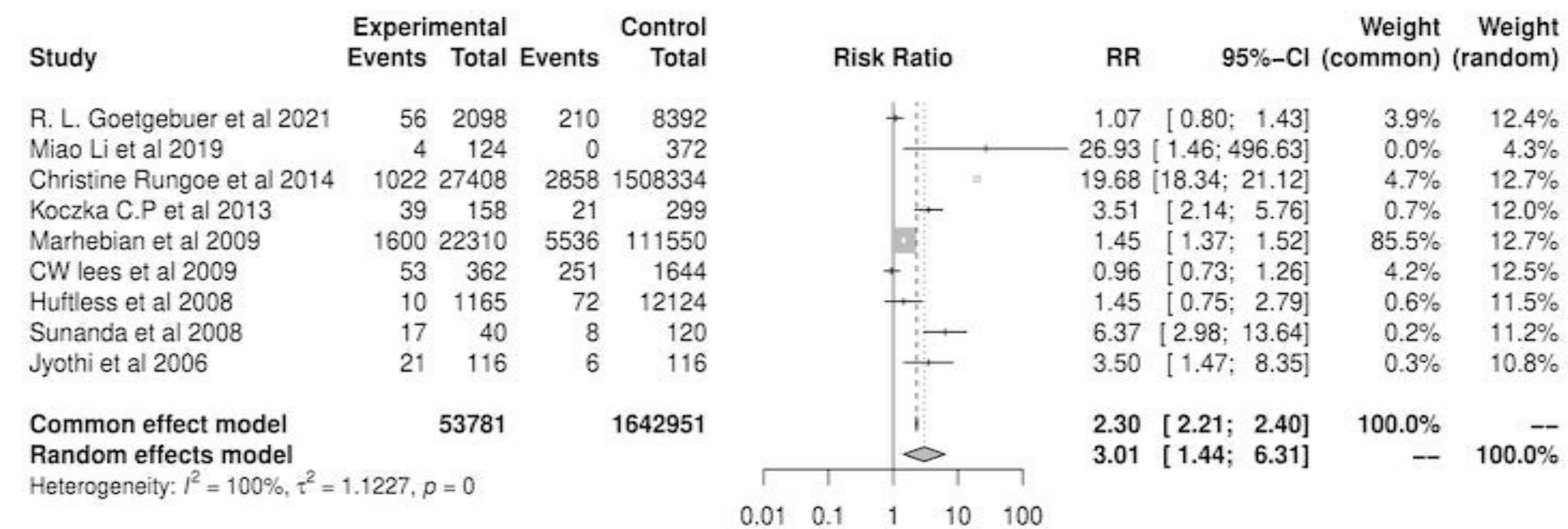
This systematic review and meta-analysis was conducted to determine the risk of cervical abnormalities in patients with inflammatory bowel disease on immunosuppressants and estimate the comparative risk with respect to the general population given that there is conflicting data available on the same.

Methods and Materials

- We searched Embase, Pubmed and Medline for studies that reported rates of cervical intraepithelial neoplasia (CIN), cervical cancer, or high-risk HPV in IBD patients and in controls
- The random effects model was used with inverse variance approach for pooled prevalence and M-H method used for the calculation of relative risk.

Results

- 522 relevant papers were identified from inception to 25th April 2022, out of which 44 titles were selected for full-text screening.
- 9 papers, which included 5 case-control and 4 cohort studies involving 53,781 patients were ultimately included in the quantitative synthesis.
- The pooled prevalence of CIN, cervical cancer and high-risk HPV in the IBD population on immunosuppressants was 0.04 (0.01 - 0.11, I²= 100%).
- Individuals with IBD on immunosuppressants were at a greater risk of cervical dysplasia/cancer when compared with healthy controls (relative risk - 3.01, 1.44 - 6.31, I²= 100%).



Discussion

- Individuals with inflammatory bowel disease on immunosuppressants are at an increased risk of developing cervical abnormalities like CIN, cervical cancer, and high-risk HPV lesions as compared to those without IBD.
- These findings point to the importance of undergoing screening at regular intervals and the significance of HPV vaccination in IBD patients in aiding to reduce the risk of developing cervical cancer.
- Given that, gastroenterologists in many patients with IBD often assume the role of the primary care physician, it is important to be aware of the increased risk of cervical cancer in this population and advocate for screening at regular intervals and HPV vaccination in IBD patients.

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