Increased incidence of “fragility” fractures in patients with inflammatory bowel disease


**Background:** The clinical significance of the high prevalence of osteopenia in inflammatory bowel disease is unclear.

**Objective:** To determine whether subjects with inflammatory bowel disease have an increased incidence of hip, spine, wrist/forearm, or rib fractures.

**Design:** Population based matched cohort study.

**Setting:** Manitoba, Canada.

**Patients:** Patients with inflammatory bowel disease in the University of Manitoba inflammatory bowel disease (IBD) database (n=6027) were matched with 10 randomly selected subjects in the general population (1.14 million) without IBD by year, age, sex, and postal area of residence.

**Measurements:** The incidence of hospitalisation for hip fracture was determined on the basis of hospital discharge records. Outpatient medical billing records and hospital discharge records were used to calculate the incidence of spine, rib, and forearm fractures. Rates were calculated on the basis of person years of follow up for 1984 to 1997.

**Results:** Patients with IBD had a significantly increased incidence of fractures at the spine (incidence rate ratio (IRR) 1.74 (95% confidence interval (CI) 1.34–2.24); p<0.001), hip (IRR 1.59 (95% CI 1.27–2.00); p=0.001), wrist/forearm (IRR 1.33 (95% CI 1.11–1.58); p=0.001), and rib (IRR 1.25 (95% CI 1.02–1.52); p=0.03), and of any of these fractures (IRR 1.41 (95% CI 1.27–1.56); p<0.001). Patients with ulcerative colitis had similar fracture rates to those with Crohn’s disease.

**Conclusion:** The incidence of these fractures among those with IBD was 40% greater than that in the general population.

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**Authors' affiliations**

N Arden, C Cooper, MRC Epidemiology Unit, Southampton General Hospital, Southampton, UK

Conflict of interest: Drs Arden and Cooper have
Correspondence to: Dr N Arden, MRC Epidemiology Unit, Southampton General Hospital, Tremona Road, Southampton SO16 6YD, UK; nka@mrc.soton.ac.uk

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Osteoporosis in patients with inflammatory bowel disease

N K Arden and C Cooper

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