Extraintestinal manifestations in inflammatory bowel disease: Prevalence and predictors in Indian patients

Debottam Bandyopadhyay, Sanjay Bandyopadhyay, Parasar Ghosh, Abhishek De, Anupam Bhattacharya, G. K. Dhali, Kshaunish Das

Abstract

**Background** There is a paucity of reports on extraintestinal manifestations (EIMs) in patients with inflammatory bowel diseases (IBD) from Asia and India.

**Methods** From May 2011 to October 2012, consecutive IBD patients underwent a detailed history and physical examination, also by trained rheumatologist, dermatologist, and ophthalmologist, about whether they experienced any EIM at the time of inclusion or in the past. The disease phenotype/severity and location was classified according to the Montréal classification. All underwent magnetic resonance imaging (MRI) of sacroiliac joints, liver function test (LFT), transabdominal ultrasound, and dual energy X-ray absorptiometry (DXA) scanning at neck femur (bilateral) and L4-L5 spine.

**Results** One hundred twenty patients were analyzed, 62 had Crohn’s disease (CD) and 58 had ulcerative colitis (UC). Thirty-eight percent had at least one while 20% suffered from multiple EIM. Except for uveitis and episcleritis, the frequency of individual EIMs did not differ between CD and UC patients. Twenty-three percent had peripheral arthritis, 18% had ankylosing spondylitis, and 13% had ophthalmological manifestations. Muco-cutaneous manifestations, aphthous stomatitis and pyoderma gangrenosum (PG), were seen in 9%. None had erythema nodosum (EN) or primary sclerosing cholangitis (PSC). Fifty percent of patients had either osteopenia or osteoporosis on DEXA. Multivariable analysis revealed female gender, Hindu religion, severe disease, and steroid usage were significantly associated with the presence of EIMs.

**Conclusion** The prevalence of EIM is similar to that reported from Europe and USA, albeit higher than that previously reported in Asian patients. Female sex, religion, severe disease, and steroid use were associated with EIM.

**Keywords** Liver disease · Spondyloarthritis · Surgery · Tuberculosis

Introduction

Extraintestinal manifestations (EIMs), especially those involving the joints, skin, eyes, and biliary tract, are quite common in patients with inflammatory bowel disease (IBD) and can affect morbidity and mortality in both Crohn’s disease (CD) and ulcerative colitis (UC) patients [1, 2]. Their reported frequencies range from 6% to 47% [3–12]. Some precede the diagnosis of IBD, although the majority accompanies the underlying disease [1]. Classic EIM in IBD includes reactive manifestations, whose course either parallel the intestinal, especially colonic, disease activity (e.g. peripheral arthritis, erythema nodosum [EN], and aphthous ulcers) or do not do so (e.g. pyoderma gangrenosum [PG], uveitis, spondyloarthropathy, and primary sclerosing cholangitis [PSC]) [1, 2, 5, 13]. Another group of EIMs, like anemia, osteopathy, cholelithiasis,