



## Pediatric Crohn's Disease in Bahrain

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Dear Editor,

In the July 2018 issue of the *Oman Medical Journal*, Isa et al interestingly described the epidemiology, clinical picture, diagnostic and therapeutic features, and outcomes of pediatric Crohn's disease (CD) in Bahrain.<sup>1</sup> It is well-known that inflammatory bowel diseases (IBDs), including CD, are associated with a variety of extraintestinal manifestations (EIMs) that might be the early manifestation of the disease itself. The autoimmune mechanisms leading to EIMs have been suggested to be related to many factors, including genetic susceptibility, antigenic display of autoantigen, aberrant self-recognition, and immunopathogenic autoantibodies against organ-specific cellular antigens shared by the colon and extra-colonic organs.<sup>2</sup> Microbes might also play an important role, probably via molecular mimicry.<sup>2</sup> Globally, 30% of patients with IBDs develop EIMs and the clinical spectrum of these EIMs varies from mild transitory to very severe lesions, sometimes more incapacitating than the intestinal disease itself.<sup>3</sup> Interestingly, the study reported only four patients (8%) with EIMs out of the 51 patients with CD studied. These included the following: eye involvement, arthritis, and clubbing each in one patient; and erythema nodosum in two patients.<sup>1</sup> The low rate of EIMs (8%) compared to 30% reported worldwide<sup>3</sup> is interesting and the following three points could plausibly explain that discrepancy.

First, there is a correlation between CD severity and the tendency to develop EIMs. The increased CD severity was found to be significantly associated with the occurrence of any EIMs ( $p < 0.001$ ).<sup>4</sup>

Second, the incidence of EIMs both before and after diagnosis of CD differs markedly by the duration of the disease. The cumulative incidence of EIMs was estimated to be 9% at one year, 19% at five years, and 29% at 15 years post-diagnosis.<sup>5</sup>

Third, the contributory roles of different genetic and environmental effects related to the pediatric population in Bahrain as well as undefined factors in accentuating the development of EIMs need to be considered.

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