

Title:

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Inflammatory bowel disease new-onset during secukinumab therapy: real-world data from a tertiary center

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Secukinumab is a monoclonal antibody that inhibits interleukin - 17A. It is currently prescribed for the treatment of psoriasis, psoriatic arthritis and ankylosing spondylitis, which are immune-mediated diseases that show significant co-heritability with IBD. (1). Although this treatment appears to be well tolerated by patients, during the last years, several cases of new- onset IBD after secukinumab have been reported.

Our primary endpoint was to estimate the cumulative incidence of IBD among patients who started secukinumab and to asses those factors related to greater risk of its development. We carried out a descriptive, retrospective study through the thorough revision of the clinical history of patients receiving secukinumab for rheumatologic and dermatologic procedures from January 2017 to December 2020. Of the overall 127 patients included, three cases of new-onset Crohn disease were identified, which corresponds to a cumulative incidence of 2.3%. The basal characteristics of patients and their IBD are summarized in table 1.

Despite levels of proinflammatory cytokines are increased in patients with IBD, IL-17 seems to play a protecting role in terms of gastrointestinal inflammation since it inhibits a Th1 immune-mediated response (2). Hence, its blockage has been associated with new-onset IBD but also with flairs of inflammatory activity among IBD diagnosed patients (3,4). In our center, the three new-onset Crohn disease needed chronic additional IBD therapies and follow-up strategies, which was linked to an increase in their medical expense and a significant deterioration of their quality of life.

We propose an exhaustive search for IBD family history and gastrointestinal symptoms prior to start those treatments. Since some patients might have subclinical bowel inflammation, monitoring their fecal calprotectin levels could be of value. If symptoms appear or fecal calprotectin levels rise from 250 µg/g (5), patients should early

interrupt the treatment and be referred for gastroenterological evaluation. Those patients with confirmed IBD must be prevented from taking anti-IL-17 drugs.

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	PATIENT 1	PATIENT 2	PATIENT 3
Sex	Male	Male	Male
Age (years)	63	62	41
Smoke history	No	No	Yes
Familiarity of IBD	No	No	No
Prior GI symptoms	No	No	No
Time of secukinumab treatment (months)	1	24	3
Indication of treatment	Ankylosing spondylitis	Psoriatic arthritis	Ankylosing spondylitis
Type of new-onset IBD	Crohn disease	Crohn disease	Crohn disease
Location of IBD	Ileal	Ileal	Ileocolic
Severity of IBD	Moderate	Mild	Mild
IBD therapy	Ustekinumab	Ustekinumab	Azathioprine
Response to treatment (RMN)	yes	Yes	Yes
Persistence of IBD 6 month after treatment (RMN)	yes	yes	Yes
Evolution of IBD (months)	39	6	12
Basal fecal calprotectin	Not determined	Not determined	Not determined

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