Specialists in Gastroenterology

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Many anti-inflammatory medications used for rheumatoid arthritis have been applied to inflammatory bowel disease (IBD) therapy. Hydroxychloroquine (Plaquenil®) has received little attention in Crohn's disease (CD).[1] This anti-malarial agent is an older disease-modifying anti-rheumatic drug and is used by rheumatologists for patients who try and fail or fear trying immunomodulator and biologic therapy. The mechanism of actions that might apply to IBD includes inhibition of T-cells and intracellular stabilization of intracellular inflammation and the immune cascade.[2-3] In ulcerative colitis (UC), hydroxychloroquine has shown similar efficacy to 5-ASA therapy[4] and although there was no statistical difference from placebo, there was moderate success with long term remission (33% of 67 patients for 2 years).[5] Furthermore it has remained effective for a number of patients for many years (Personal Communication, Lloyd Mayers, MD, 2010).

Electronic charts on 201 CD and 64 UC patients seen by one community gastroenterologist between June 2008 and January 2010 were queried using a computerized prescription search. Hydroxychloroquine 200 mg twice daily was offered to mild to moderate CD ileitis patients when they failed or refused budesonide, purinethol or rifaximin. Crohn's colitis patients were offered therapy if they failed or were intolerant to 5-ASA or if they failed or refused purinethol. One CD patient partially failing biologic therapy was given hydroxychloroquine. UC patients were given hydroxychloroquine when they failed or were allergic or hypersensitive to 5-ASA therapy or if they failed or refused purinethol. A questionnaire was mailed to these patients to determine efficacy and safety in a retrospective fashion. All patients treated had ophthalmologic examinations twice yearly. A chart review determined correlation of these questionnaires with follow up visits in the clinic and any variances were reviewed with the patient.

Hydroxychloroquine was used by 17 CD (3 isolated ileal, 10 ileocolonic and 4 isolated colitis) and 2 UC patients with left-sided involvement; F12/M7; mean age 51 years. Half of the patients received concomitant therapy: 5-ASA (5), antibiotic (4) and prednisone (1). In 3 of the monotherapy CD patients, biological therapy was added after 3, 3, and 8 years of remission when the effect of biologic therapy was waning and the rating of efficacy was determined while they were on hydroxychloroquine. The mean (±1SD) duration of hydroxychloroquine treatment for all patients was 132 (± 140) weeks (range 3 - 416 weeks). Both UC patients had marked improvement: one with partial response to mesalamine is currently in remission at 24 weeks. The other was a monotherapy patient who stayed in remission for 208 weeks but ultimately flared and required biological therapy. Efficacy of hydroxychloroquine as determined by the 17 CD patients was rated as follows: marked improvement (3), moderate improvement (7), mild improvement (1), unchanged (5), slightly worse (1). In a CD patient partially failing biologic therapy, addition of hydroxychloroquine for 4 weeks failed to help. Efficacy in the 8 CD patients with hydrochloroquine monotherapy was: marked improvement (3), moderate improvement (3) and unchanged (2). Maximal response appeared to differ by location of CD: a) marked improvement in 1/10 and moderate improvement in 7/10 ileocolonic patients; and b) marked improvement in 2 of 4 isolated colon CD patients. In comparison the 3 isolated ileal CD patients did not improve. Self-limited side effects occurred in 2/19 (11%) patients: nausea (2) and abdominal pain and diarrhea in one. Step up therapy for mild to moderate Crohn's disease[6] and ulcerative colitis[7] may need to be revised when there is incomplete response, drug reactions or concerns about immune suppression. In limited clinical experience, hydroxychloroquine as primary or adjunctive therapy appears to offer reasonable clinical efficacy and low side effect profile in mild to moderate IBD.

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