



PSORIASIS

DOSE OPTIMIZATION OF BRODALUMAB IN MODERATE-TO-SEVERE PLAQUE PSORIASIS

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Background: Brodalumab, a monoclonal antibody that targets the interleukin-17 receptor, is a new treatment option for moderate-to-severe plaque psoriasis with a unique mechanism of action. The current recommended dosing regimen is a 210 mg subcutaneous injection at weeks 0, 1, and 2, and every 2 weeks thereafter. We present a case of a patient with recalcitrant moderate-to-severe plaque psoriasis who required a higher maintenance dose frequency of 210 mg of brodalumab subcutaneously every week.

Observation: Our patient is a 39 year old male diagnosed with psoriasis at age 19. He failed multiple topical and oral treatments, and was unable to access phototherapy. Previous biologic therapies used included ustekinumab, adalimumab, infliximab, secukinumab, ixekizumab, and guselkumab. All biologics were trialed at adequate doses and durations to assess efficacy. Residual Psoriasis Area and Severity Index (PASI) and Body Surface Area (BSA) scores on guselkumab were 12.6 and 12%, respectively. The patient was then switched to brodalumab at the recommended dosing regimen. After 4 weeks of treatment, a significant but incomplete response was achieved (PASI 2.4, BSA 2%). The patient reported that his psoriasis cleared after the three weekly loading doses and was returning with maintenance dosing. In collaboration with the patient, it was decided to increase the maintenance dose to 210 mg every week. After 2 doses, complete skin clearance was achieved and this response had endured 3 months later. The patient has not reported any adverse events.

Key message: To our knowledge, this is the first report of a patient receiving a maintenance dose of 210 mg of brodalumab weekly. In patients with refractory plaque psoriasis only partially responsive to the recommended maintenance dose, an increase in frequency to every week may be worth consideration. Further research is required to elucidate the effectiveness and long-term safety of this regimen.

