ASSOCIATION OF ENTHESITIS WITH ACHIEVEMENT OF NORMAL QUALITY OF LIFE AND CLINICAL RESPONSE IN PATIENTS WITH NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS TREATED WITH ADALIMUMAB

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Background: Enthesitis, a key pathology in axial spondyloarthritis (axSpA), has been difficult to treat with conventional therapies and may take longer to resolve than other disease manifestations. It is unknown if failure to attain resolution of enthesitis affects achievement of normal quality of life (QoL) and clinical response.

Objectives: To assess if enthesitis at baseline (BL) and after 12 wks of adalimumab (ADA) treatment in the ABILITY-3 study associates with achieving normal QoL and clinical response in patients (pts) with non-radiographic axSpA (nr-axSpA).

Methods: ABILITY-3 enrolled adult pts with nr-axSpA with objective evidence of axSpA (BASDAI > 4, and Patient’s Assessment of Total Back Pain score > 4), and an inadequate response to ≥2 NSAIDs. Pts received ADA 40 mg every other wk during a 28-wk open-label lead-in. Pearson’s correlation coefficients were used to assess the relationship between total enthesitis count (sum of Maastricht Ankylosing Spondylitis Enthesitis Score [MASES] and plantar fascia enthesitis score) and QoL and disease activity at BL. Multivariable stepwise logistic regression was used to evaluate the relationship between total enthesitis count or enthesitis location and normal QoL (EQ-5D > 0.898) or anterior superior iliac spine (SF36 PCS > 50) and clinical response at wk 12. Each 1-unit increase in BL total enthesitis count was associated with 7% lower odds of ASDAS-ID (OR [95% CI]; 0.93 [0.88, 0.99], p = 0.018) and 6% lower odds of BASA40 (0.94 [0.89, 0.99], p = 0.024) at wk 12 and was not associated with normal QoL or ASAS40 at wk 12. Total enthesitis count at wk 12 was associated with lower odds of normal QoL and clinical response at wk 12 (Table). Achievement of normal QoL at wk 12 was less likely if pts had BL enthesitis at the posterior (EQ-5D > 0.898) or anterior superior iliac spine (SF36 PCS > 50), and pts with BL enthesitis at the 7th costochondral joint were less likely to achieve clinical response at wk 12 (Table).

Conclusions: 39% of pts achieved complete resolution of enthesitis after 12 wks of ADA treatment. Total enthesitis count at BL was not associated with normal QoL and inversely associated with clinical response at wk 12. Total enthesitis count at wk 12 was negatively associated with normal QoL and clinical response. Our exploratory analysis suggested possible inverse associations of specific BL enthesitis sites with achievement of normal QoL and clinical response; however, additional research is needed to further define these relationships.

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