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SAT0294

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 inflammation (MRI positive or elevated hsCRP), active disease at BL (ASDAS ≥ 2.1 , 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 SF36 MCS/PCS ≥ 50) and clinical response (ASDAS-ID [ASDAS < 1.3], ASAS40, or BASDAI50) at wk 12.

Results: At BL, 74% (501/673) of pts had enthesitis, and mean (95% CI) total enthesitis count was 3.7 (3.42, 3.98). Enthesitis resolved in 39% (196/501) of pts, and total enthesitis count was 1.9 (1.68, 2.12) at wk 12 of ADA treatment. At BL, total enthesitis count significantly correlated with all QoL and disease activity measures (Table). 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 BASDAI50 (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).

Abstract SAT0294 – Table 1. Association of Total Enthesitis Count With QoL and Disease Activity at BL and Clinical Response at Wk 12

Baseline			
Measure	n	Pearson Correlation Coefficient	
EQ-5D	672	-0.23*	
SF-36 PCS	672	-0.18*	
SF-36 MCS	672	-0.15*	
BASDAI50	673	0.27*	
ASDAS	673	0.18 [†]	
Patient Global Assessment	673	0.14*	
Physician Global Assessment	671	0.17*	
Wk 12			
Measure	n	Odds Ratio (95% CI)	
EQ-5D ≥ 0.898	658	0.62 (0.48, 0.78)*	
SF-36 PCS ≥ 50	658	0.70 (0.61, 0.81)*	
SF-36 MCS ≥ 50	658	0.85 (0.80, 0.91)*	
ASDAS-ID	628	0.82 (0.75, 0.91)*	
ASAS40	632	0.82 (0.76, 0.88)*	
BASDAI50	632	0.74 (0.69, 0.81)*	
Enthesitis Location at baseline			
Measure at wk 12	n	Location	Odds Ratio (95% CI)
EQ-5D ≥ 0.898	660	Posterior superior iliac spine L/R	0.58 (0.34, 0.99) [‡]
SF-36 PCS ≥ 50	660	Anterior superior iliac spine L/R	0.60 (0.37, 0.96) [‡]
SF-36 MCS ≥ 50	663	—	—
ASDAS-ID	630	7th costochondral joint L/R	0.57 (0.36, 0.91) [‡]
ASAS40	637	7th costochondral joint L/R	0.62 (0.42, 0.91) [‡]
BASDAI50	634	7th costochondral joint L/R	0.60 (0.40, 0.91) [‡]

Locations evaluated included 1st costochondral joint L/R, 7th costochondral joint L/R, anterior superior iliac spine L/R, posterior superior iliac spine L/R, iliac crest L/R, 5th lumbar spinous process, proximal insertion of Achilles tendon L/R, and plantar fascia L/R. ASAS40, Assessment of SpondyloArthritis international Society 40% improvement; ASDAS-ID, Assessment of SpondyloArthritis international Society inactive disease; BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; EQ-5D, EuroQol 5 dimension; MCS, mental component summary; PCS, physical component summary; QoL, quality of life; SF-36, short form health survey.

* $P<0.001$; † $P<0.01$; ‡ $P<0.05$.

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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SAT0295

TOOL FOR THE PRESCRIPTION OF EXERCISE IN SPONDYLOARTHRITIS WITH MULTIMEDIA ANIMATIONS (EJES-3D): PILOT STUDY

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Background: Exercise is a basic pillar in the management of axial spondyloarthritis (SpA-axe), together with pharmacological treatment^{1,2}. Since it has been shown to improve pain, inflammation, mobility, physical and respiratory function. The information provided to the patient on paper on exercises has limitations of understanding. To this must be added the barriers to exercise that patients perceive, such as the lack of adaptation of the exercises according to the SpA phases