Anti-TNF response rates in radiographic and non-radiographic axial spondyloarthropathy

With recent evolution of classification systems for axial spondyloarthropathy to include non-radiographic disease, there has been an increasing emphasis to treat inflammatory back pain early, potentially aiming to halt disease progression and prevent chronic damage. Current National Institute of Health and Care Excellence (NICE) criteria for commencement of anti-tumour necrosis factor (TNF) therapy in spondyloarthropathy are based on the modified New York criteria of 1984. As such, this requires radiographic changes based on plain film X-ray rather than allowing for the more sensitive modality of MRI. This criterion, therefore, excludes a group of patients that may potentially benefit from biological therapy. Published studies by Song *et al* (ESTHER[1]) and Sieper *et al* (ABILITY-1[2]) as well as meta-analysis by Callhoff *et al*[3] have shown similar response rates to anti-TNF in both radiographic and non-radiographic groups. We sought to assess whether the trial data mentioned above were similar to the clinical setting by retrospectively looking at a local biological database of patients with ankylosing spondylitis on anti-TNF therapy. Fifty-nine patients were divided into three groups: group A (N=29)—sacroiliitis on X-ray (ie, radiographic group); group B (N=23)—sacroiliitis on MRI with normal X-ray (ie, non-radiographic group) and group C (N=7)—sacroiliitis on MRI but have no record of plain film X-ray. After 3 months, the number of patients achieving an adequate response to anti-TNF, according to NICE criteria, was group A=14 (48%), group B=11 (48%) and group C=4 (57%). In those achieving adequate responses according to NICE, the percentage improvements in Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), visual analogue scale (VAS) for pain and Bath Ankylosing Spondylitis Functional Index (BASFI) were similar. Average improvements in BASDAI were group A=3.96 (55%), group B=4.46 (56%) and group C=4.45 (57%). Average improvements in VAS were group A=4.47 (55%), group B=4.6 (56%) and group C=5 (57%). Average improvements in BASFI were group A=4.2 (56%), group B=2.93 (44%) and group C=2.66 (46%). In summary, this clinical review appears to show similar response rates between both radiographic and non-radiographic spondyloarthropathy groups after 3-month therapy with anti-TNF and poses the question should current guidelines for use of these medications be modified to include non-radiographic disease.

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