

**P275 THE EXTENT AND CHARACTERISTICS OF DIAGNOSTIC DELAY IN AXSPA: A SYSTEMATIC REVIEW**

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**Background:** Axial spondyloarthritis (axSpA) is an inflammatory arthritis predominantly affecting the spine. It is characterised by chronic back pain, stiffness and fatigue. As axSpA progresses it can cause disability, reduction in quality-of-life, depression and impacts on work. Prompt diagnosis is important, but symptoms associated with axSpA are common in the general population resulting in diagnostic delay. The reported diagnostic delay for axSpA varies in the literature, ranging from five to fifteen years. The aim of this review was to ascertain the extent of axSpA diagnostic delay and report on axSpA characteristics associated with diagnostic delay.

**Methods:** A systematic review was conducted to identify articles reporting diagnostic delay in axSpA. Inclusion criteria were studies including adult axSpA populations, cohort, cross-sectional or case-control design and reporting a median time-period of delay from axSpA symptom onset to final axSpA diagnosis (studies reporting

mean delay were excluded due to skewness of data). Data was also extracted which related to delay as a result of specific axSpA characteristics. Narrative synthesis was used to report our findings.

**Results:** 9,848 articles were initially identified. After title, abstract and full-text review, 15 articles reported median diagnostic delay. Of these, 2 were from the UK, 2 from Germany, and 1 each from India, Norway, France, USA, Iran, Turkey, China and Italy. Combined, the total number of participants across eligible papers was 10,661. Though median delay ranged from  $\leq 1$  to 8 years, the majority (60%) of articles reported a median delay of between 2-5 years. Regarding the role of specific axSpA characteristics on delay, the most noted causes for delay were lack of extra-articular axSpA symptoms (5.9 vs. 8.7 years of delay for patients with and without extra-articular symptoms respectively) and misdiagnosis. Common misdiagnoses were lumbar disc herniation, rheumatoid arthritis and mechanical back pain (MBP), with the latter being significantly associated with delayed diagnosis (OR 2.83(95% CI 1.16-6.87)). Finally, delay is far from uniform, with a UK study reporting that 30.3% of patients are diagnosed within 2 years, 21% in 3-5 years, 19.9% in 6-10 years, 19.2% after 11-20 years and 9.6% after 20 years.

**Conclusion:** Though diagnostic delay of axSpA is considerable, affecting long term outcomes in a large number of patients, it is not as long as previously reported by using mean delay, which is more affected by bias (long term delays in small numbers of individuals) than median delay. Further research into the specific barriers and facilitators of delay is required to help reduce this delay in the future.

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