The cost of arthralgia 'pretreatment' to prevent rheumatoid arthritis

The article by Helm-van Mil and Landewé¹ represents the tip of the iceberg. Justifying initiation of medications, in the absence of clinical or radiological evidence because an individual might at some time develop a particular disease is a speculative approach. We are now in an era of evidence-based medicine and such evidence is currently lacking for recognition of who will develop rheumatoid arthritis (RA). Actually, even controlled studies of undifferentiated arthritis failed to reveal progression to RA.^{2–4} If progression to RA was not evidenced in those individuals who actually initially had arthritis, why would we have higher expectations for arthralgia? That speculation seems fallacious.

We have no idea what percentage, if any, of individuals with arthralgia will go on to develop RA. Even if medicinal interventions routinely utilised in the treatment of RA were without harmful side effects, their fiscal impact is substantial: cost of medications and safety monitoring, time loss (related to office visits and laboratory testing) and lifestyle complications (eg, avoiding contact with virally infected or freshly (live) vaccinated individuals). However, medical interventions are not without side effects. They are potentially significant and costly. Without evidence of what percentage of individuals with arthralgia, we cannot even conduct a cost-benefit analysis. All we can determine is the cost.

So, one must question the justification of initiating interventions (that are not without risk) because of the unverified speculation that the individual might at some time develop a particular disease (eg, RA). Helm-van Mil and Landewé¹ suggested that 'disease activity can be so well suppressed in most RA patients, too early treatment may do more harm than good'. That observation holds doubly for those individuals whose complaint (arthralgia) is limited joint pain without clinical evidence of arthritis.

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REFERENCES

- 1 van der Helm-van Mil A, Landewé RBM. The earlier, the better or the worse? towards accurate management of patients with arthralgia at risk for RA. *Ann Rheum Dis* 2020;annrheumdis-2019-216716.
- 2 van Dongen H, van Aken J, Lard LR, et al. Efficacy of methotrexate treatment in patients with probable rheumatoid arthritis: a double-blind, randomized, placebo-controlled trial. *Arthritis Rheum* 2007;56:1424–32.
- 3 Saleem B, Mackie S, Quinn M, et al. Does the use of tumor necrosis factor antagonist therapy in poor prognosis. *undifferentiated arthritis prevent progression to rheumatoid arthritis?* *Ann Rheum Dis* 2008;67:1178–80.
- 4 Emery P, Durez P, Dougados M, et al. Impact of T-cell costimulation modulation in patients with undifferentiated inflammatory arthritis or very early rheumatoid arthritis; a clinical and imaging study of abatacept (the adjust trial). *Ann Rheum Dis* 2010;59:510–6.