Can thermal therapy of ankylosing spondylitis induce an activation of the disease?

[Samborski W; Sobieska M; Mackiewicz T; Stratz T; Mennet M; Muller W]

Z Rheumatol 1992 May-Jun;51(3):127-31

AB - A randomized, open, controlled study was carried out in eight patients with spondylitis ankylosans, in a cross-over procedure including total body cryotherapy and whole spine paraffin mud packs. The effect of both therapies on clinical status and different laboratory data was investigated. No clinical changes were seen after either therapy; in contrast, in answering the spine function questionnaire patients reported an improvement after cryotherapy and a worsening after thermotherapy, but because of the small number of patients no positive conclusion was possible. The acute phase proteins (alpha-1-AGP, alpha-1-ACT, alpha-2-haptoglobin and alpha-2-coeruloplasmin) did not show any changes, only CRP increased after thermotherapy and declined after cryotherapy. Interesting changes were seen in the glycosylation profile of alpha-1-AGP: after thermotherapy an increase of bi-antennary oligosaccharides occurred, observed as appearance of a third peak in the affinity immunoelectrophoresis with con A and an increase of reactivity-coefficient of alpha-1 and glycoprotein which was also seen in the exacerbation of AS. This shows, that an activation of the inflammatory process may be possible by thermotherapy (perhaps because of an amplification of Il-6 production), but not by cryotherapy. Similar studies should be conducted in larger numbers of patients.

CLINICAL TRIAL; JOURNAL ARTICLE; RANDOMIZED CONTROLLED TRIAL

LA - German

RN - 0 (Acute Phase Proteins)