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Attentional function in fibromyalgia and rheumatoid arthritis

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1 Works for me [dx.doi.org/10.17504/protocols.io.bq2zmyf6](https://doi.org/10.17504/protocols.io.bq2zmyf6)

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ABSTRACT

Concentration difficulties, forgetfulness and mental slowness are common in fibromyalgia syndrome (FMS); initial findings suggest that rheumatoid arthritis (RA) may also be accompanied by cognitive impairments. This study aimed to compare attentional performance between patients with FMS and RA. Attention was quantified in the domains of alerting, orienting and executive control using the Attentional Network Test – Interaction (ANT-I) in 56 women with FMS, 41 women with RA and 50 healthy women. Pain severity was statistically controlled in the group comparison. While FMS patients exhibited longer reaction times and made more errors on the ANT-I than RA patients and healthy women, performance did not differ between RA patients and healthy women. The magnitude of group differences did not vary by the experimental conditions of the ANT-I, suggesting a general attentional deficit in FMS rather than specific impairments in the domains of alerting, orienting and executive control. Differences between patient groups may relate to the different pathogenetic mechanisms involved in the disorders, i.e. inflammatory processes in RA and central nervous sensitization in FMS. In FMS, heightened activity in the pain neuromatrix may interfere with attention, because it requires enhanced neural resources in brain areas that are involved in both pain and attentional processing.

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