



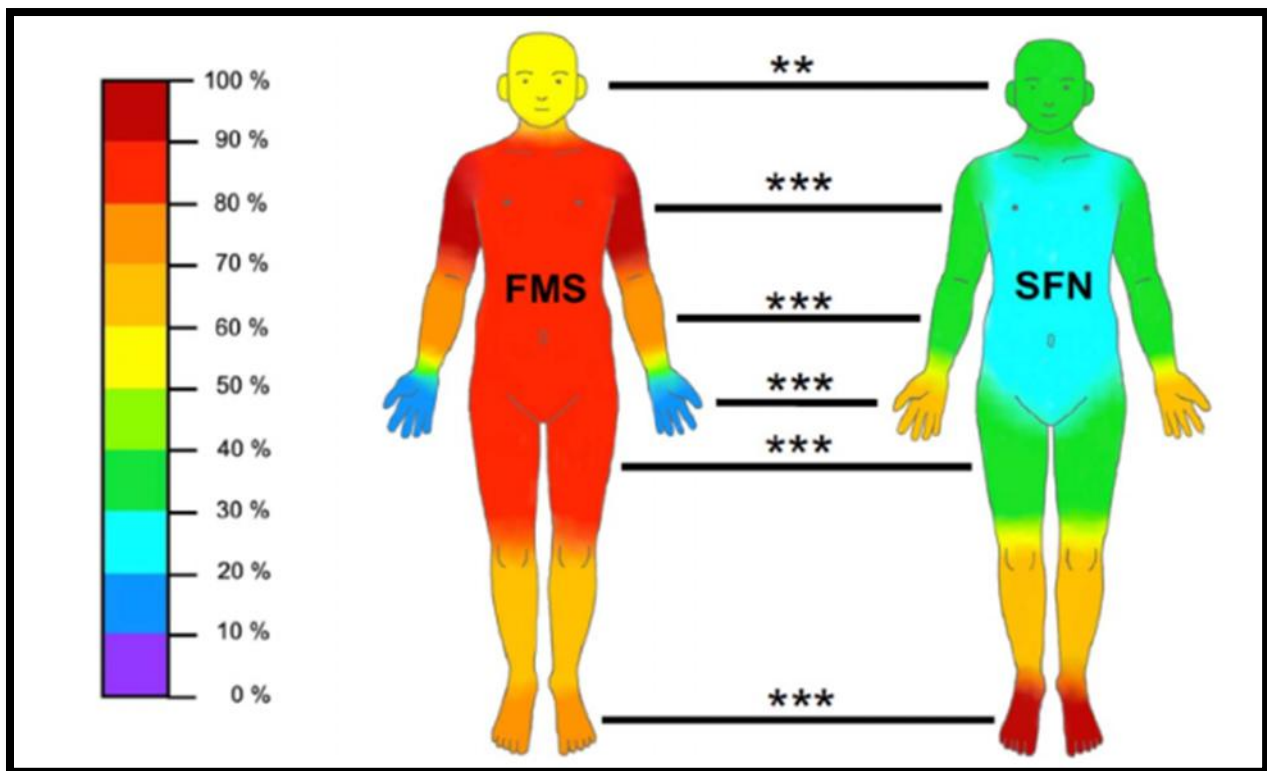
Distinguishing Fibromyalgia Syndrome From Small Fiber Neuropathy

Introduction Fibromyalgia syndrome (FMS) and small fiber neuropathy (SFN) are distinct pain conditions that share commonalities and may be challenging as for differential diagnosis.

Objective To comprehensively investigate clinical characteristics of women with FMS and SFN to determine clinically applicable parameters for differentiation.

Methods We retrospectively analyzed medical records of 158 women with FMS and 53 with SFN focusing on pain-specific medical and family history, accompanying symptoms, additional diseases, and treatment. We investigated data obtained using standardized pain, depression, and anxiety questionnaires. We further analyzed test results and findings obtained in standardized small fiber tests.

Figure 1. Proportion of patients who reported pain in distinct body areas. The graph depicts the frequency of pain reported in distinct body areas in relation to the FMS and SFN patient groups.



Results

- FMS patients were on average ten years younger at symptom onset, described higher pain intensities requiring frequent change of pharmaceuticals, and reported generalized pain compared to SFN.
- Pain in PFM was generalized and variable, while mainly focal and constant in SFN.
- Pain in FMS was accompanied by irritable bowel or sleep disturbances, and in SFN by paresthesias, numbness, and impaired glucose metabolism.

- Family history was informative for chronic pain and affective disorders in FMS and for neurological disorders in SFN patients.
- Small fiber pathology in terms of skin denervation and/or thermal sensory threshold elevation was present in 110/158 (69.7 %) FMS patients and 39/53 (73.6 %) SFN patients.
- FMS patients mainly showed proximally reduced skin innervation and higher corneal nerve branch densities whereas SFN patients were characterized by reduced cold detection and prolonged electrical A-delta conduction latencies.

Conclusions Our data show that FMS and SFN differ substantially. Detailed pain, drug and family history, investigating blood glucose metabolism, and applying differential small fiber tests may help to improve diagnostic differentiation and targeted therapy.

REFERENCE

Sarah Jansch, S. et al. (2024). Distinguishing Fibromyalgia Syndrome From Small Fiber Neuropathy: A Clinical Guide. *PAIN Reports* 9(1):e1136. DOI:10.1097/PR9.0000000000001136