

Poster presentation

Chronic musculoskeletal pain syndrome in children: Preliminary validation of physiotherapy assessment methods

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Introduction, aim

Chronic musculoskeletal pain syndrome (CPS) is difficult to diagnose and treat, but also to assess efficacy of its therapies. Psychology and physiotherapy methods have been variably applied. We aimed to develop a novel battery of physiotherapy tests to combine them with existing psychology methods in order to obtain a complex CPS assessment tool.

Patients and methods

Following groups were examined: Patients with the new diagnosis of CPS ($n = 16$), patients with active JIA ($n = 17$) and 25 age and sex matched healthy children (median age 15, range 11–18 years). In each individual a trained physiotherapist assessed: hypermobile joints (Beighton score), painful points (MPPS), stability (balance test), walking (plain, stairs), limitation of joint movement, presence of skin changes (colour, temperature, sweating), superficial and deep skin perception, hand function.

Results

While hypermobile scores did not differ between the groups, fibromyalgia score was significantly higher in CPS patients than in healthy children ($p = 0.02$), but not in JIA patients ($p = 0.08$). Balance test differed significantly between both disease groups (CPS, JIA) and healthy children ($p = 0.004$, 0.04 , resp.) as did presence of walking difficulties ($p = 0.0001$, 0.0002) and joint limitation. Presence of skin colour changes and hand function limi-

tation distinguished CPS from healthy children ($p = 0.02$).

Conclusion

Combination of painful point survey, balance and walking, skin colour change and hand limitation tests appear to be useful methods to assess physical aspects of pain syndromes. Ability of the proposed tool to reflect significant clinical change is currently explored in a longitudinal follow-up study.

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