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## Original Article

## High-intensity laser therapy versus pulsed electromagnetic field in the treatment of primary dysmenorrhea

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Abstract. [Purpose] To determine the efficacy of high intensity laser therapy (HILT) versus pulsed electromagnetic field (PEMF) in the treatment of primary dysmenorrhea. [Subjects and Methods] This was a randomized clinical trial that included 52 girls diagnosed with primary dysmenorrhea and who were assigned randomly into two groups of equal numbers. The treatment was three sessions every cycle for three consecutive cycles where group (A) included those participants treated with HILT 15 min/session and group (B) those who were treated with PEMF 30 min/session. All patients were evaluated before starting the treatment as well as after the end of treatment by present pain intensity scale and the prostaglandin level in blood and pain relief scale at the end of treatment for both groups. [Results] The results showed a significant decrease in the severity of pain, statistically significant decrease in prostaglandin level in blood, and a statistically significant pain alleviation in both groups. With comparison between both groups there was a statistically significant decrease in the severity of pain, significant decrease in the blood levels of PGF2a, in group (A) than group (B). [Conclusion] Both HILT and PEMF are effective in the treatment of primary dysmenorrhea with HILT being superior to PEMF.

Key words: Dysmenorrhea, High intensity laser therapy, Pulsed electromagnetic field

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