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The Effect of Laser Therapy Along With Mediterranean Diet Versus Mediterranean Diet Only on Older Adults With Non-alcoholic Fatty Liver Disease: A Randomized Clinical Trial

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Abstract

Introduction: Obesity is the major pathogenesis of the non-alcoholic fatty liver disease (NAFLD). The combination of low-level laser therapy (LLLT) and Mediterranean diet (MD) is a new approach for improving liver function. **Methods:** 60 obese older adults (65-75 years old) with NAFLD were randomly assigned equally to two groups: a study group and a control group. The study group received LLLT and MD, while the control group followed MD only. These findings evaluated the changes in the level of liver enzymes, serum lipid profile, and anthropometric measurements (body mass index [BMI] and waist circumference [WC]) after 12 weeks of intervention. **Results:** Both study and control groups showed a significant reduction in the levels of liver enzymes, serum lipid profile, BMI, and WC ($P < 0.001$ and $P < 0.01$ respectively); however, the study group showed more significant results compared to the control group ($P < 0.01$). **Conclusion:** LLLT and MD may be considered as a treatment approach for NAFLD in older adults to improve their liver function, control dyslipidemia, and help in losing weight.

Keywords: Laser therapy; Liver function; Mediterranean diet; Non-alcoholic fatty liver.

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Figures

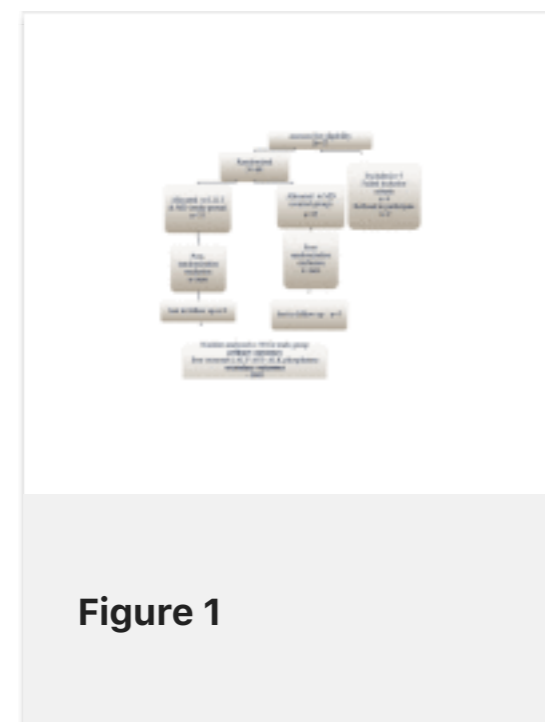


Figure 1

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