

***Osbeckia octandra* (HEEN BOWITIYA) HERBAL TEA: EFFECT ON METABOLIC INDICES IN METABOLIC DYSFUNCTION ASSOCIATED FATTY LIVER DISEASE**

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Metabolic dysfunction-associated fatty liver disease (MAFLD) is a common, multisystemic disorder. *O. octandra* is used in traditional medicine to treat liver diseases and diabetes mellitus. The study aimed to evaluate the effect of *O. octandra* herbal tea on metabolic indices in MAFLD. A 16-week, randomised, controlled, open-label trial including 122 MAFLD patients assigned to a test group ($n = 62$), receiving *O. octandra* tea (6.0 g plant powder per day, every other day) with standard therapy and lifestyle intervention, or a control group ($n = 60$), receiving standard therapy with lifestyle intervention alone was conducted at Colombo North Teaching Hospital. Glycemic indices, lipid profile, hs-CRP, and free thyroxin (FT4) were determined at baseline and after 16 weeks. The paired *t*-test and analysis of covariance test were used to analyse the data. Fasting blood glucose (FBS) and HbA1c showed a non-significant increase in both arms ($p > 0.05$) at follow-up, with no significant differences in the changes between the test and control groups ($p = 0.87$, $p = 0.67$). Total cholesterol and low-density lipoprotein cholesterol showed a significant increase in both groups ($p < 0.05$) at follow-up. However, a non-significant increase (0.6%) in high-density lipoprotein cholesterol (HDL-C) (reference $> 40 \text{ mg dL}^{-1}$ for males, $> 50 \text{ mg dL}^{-1}$ for females) ($p = 0.71$), and a decrease (6%) in triglycerides (reference $< 150 \text{ mg dL}^{-1}$, $p = 0.16$) were observed following the intervention in the test group. The changes of lipid profile parameters were not significantly different between the test and control groups at follow-up ($p > 0.05$). Hs-CRP reduced significantly in both test and control groups ($p = 0.03$, $p = 0.002$), with no significant difference between the test and control groups ($p = 0.14$). A non-significant increase in FT4 was observed in the control group after 16 weeks ($p = 0.053$), while the changes did not differ significantly between the test and control groups ($p = 0.14$). The ingestion of *O. octandra* herbal tea every other day for four months contributed to a slight increase in HDL-C and a decrease in triglycerides, with no major impact on other studied parameters in MAFLD patients.

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