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Abstract

Single-Center Observational Study of Impact of Regular Consumption of Fish Oil Supplements Alongside Weight Loss Medicines on Metabolic Profile of Patients with Metabolic Syndrome †

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Abstract: The prevalence of MS has increased exponentially in the last two decades, and more so after the COVID-19 pandemic, alongside numerous weight loss interventions with both favorable and adverse health outcomes. India is a capital of patients with metabolic syndrome occurring at quite a young age due to altered body composition with inflammations going on backstage. Various studies have already documented low to very low consumption of Omega-3 FA across many parts of the world, including India, and to overcome this, we designed a strategy to supplement Omega-3 FA alongside a standard of care and medical and lifestyle interventions for MS. In this study, all patients were given a mixed EPA/DHA 1 gm Omega-3 FA capsule within 2 h of the completion of meals three times a day, all through the study duration of 6 months. There were significant reductions in metabolic profiles, including lipid profiles, hs CRP, hepatic transaminases, and glycemic parameters, across a wide range of metabolic derangements. Among patients with dyslipidemia, there were significant reductions in triglycerides and borderline elevations in HDL. In diabetic and prediabetic patients, there were significant reductions in FBS, PPBS, and glycemic parameters like HBA1C. Many participants with prediabetes and diabetes had improvements in fibromyalgia, lethargy, and lassitude. To conclude, there is a potential for optimizing the use of Omega-3 FA in countries with low to very low consumption of fatty fish, and due to its multimodal actions and safety profile, it is assumed that the majority of patients will need such supplements to improve their metabolic profiles.

Keywords: MS; EPA/DHA

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