Omega-3 Polyunsaturated Fatty Acids and Depression in Patients with Cardiovascular Diseases

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Background: Polyunsaturated fatty acids (PUFAs) have been suggested as a possible link between depression and cardiovascular disorders (CVDs). This study aims to study the PUFAs levels in CVDs patients with and without depression. Methods: Forty-four CVDs patients were assessed with Hamilton Rating Scale for Depression (HAMD), reported on their psychiatric and somatic symptoms, and had their cardiovascular markers, EKG, and red blood cell PUFAs measured.Results: Depression group had higher scores in depression (p=0.000) and somatic symptoms (p=0.001). DHA had negative correlation with delusion symptom (p=0.027) and fatigue severity (p=0.004), while AA had positive correlation with CRP (p=0.038). In the model of PUFA levels, somatic symptoms and CV markers, DHA had significant negative correlation with fatigue, while AA had positive correlation with CRP.Conclusion: Negative correlation between blood DHA level and fatigue may suggest the protection of DHA against development of somatic symptoms such as fatigue in CVDs patients.