International Journal of Women's Health

Int J Womens Health. 2011 Mar 9;3:87-97.

Understanding hypertriglyceridemia in women: clinical impact and management with prescription omega-3-acid ethyl esters.

Dayspring TD.

North Jersey Institute of Menopausal Lipidology, Wayne, NJ, USA.

Abstract

BACKGROUND: Elevated triglycerides (TGs) are a common lipid disorder in the US and are associated with comorbidities such as pancreatitis, obesity, type 2 diabetes, and metabolic syndrome. TGs are generally elevated in postmenopausal women compared with premenopausal women. Meta-analysis has shown that elevated TGs are associated with an increased risk of coronary heart disease (CHD).

OBJECTIVE: This article provides a general overview of TG metabolism and reviews data on the epidemiology and risk of elevated TGs in women, as pregnancy and menopause, in particular, have been associated with unfavorable changes in the lipoprotein profile, including elevations in TGs. In addition, this review seeks to explain the recommended TG goals and treatment options for hypertriglyceridemia with an emphasis on severe hypertriglyceridemia (TGs ≥ 500 mg/dL) and its respective treatment with prescription omega-3-acid ethyl esters (P-OM3).

METHODS: MedLine was searched for articles published through August 2009 using the terms "hypertriglyceridemia" and "dyslipidemia", with subheadings for "prevalence", "women", "treatment", "guidelines", "risk", and "omega-3 fatty acids". Publications discussing the epidemiology of hypertriglyceridemia, CHD risk, treatment guidelines for lipid management, or clinical trials involving P-OM3 were selected for review. The reference lists of relevant articles were also examined for additional citations.

RESULTS: Hypertriglyceridemia is associated with increased CHD risk. Women, especially those with polycystic ovarian syndrome, type 2 diabetes, or who are postmenopausal, should be monitored regularly for the impact of hypertriglyceridemia on their lipid profile. Cardiovascular risk of TGs can be indirectly assessed by monitoring non-high-density lipoprotein cholesterol (non-HDL-C) levels. There are multiple sets of guidelines providing recommendations for desirable low-density lipoprotein cholesterol, TG, and non-HDL-C levels. Treatment of hypertriglyceridemia includes lifestyle interventions and, if needed, pharmacologic therapy. In patients with severe hypertriglyceridemia, P-OM3 can reduce TGs by up to 45%.

CONCLUSION: Physicians should regularly monitor the lipid profile of their female patients. Any lipid abnormality should be managed promptly according to established guidelines. P-OM3 provide a well-tolerated option for the treatment of severe hypertriglyceridemia.