Fish oil for postpartum depression

Sixteen women with postpartum depression were randomly assigned to receive 0.5 g/day, 1.4 g/day, or 2.8 g/day of omega-3 fatty acids from fish oil for eight weeks. In the group as a whole, the mean score on the Hamilton Rating Scale for Depression decreased (improved) by 48.8% (from 19.1 to 10.0). None of the different fish oil doses was significantly more effective than the other doses. The lowest dose used in this study was equivalent to 4.7 g/day of fish oil.

Comment: Previous studies have suggested that consuming adequate amounts of long-chain omega-3 fatty acids (i.e., eicosapentaenoic acid and docosahexaenoic acid from fish oil) during pregnancy may reduce the incidence of preterm delivery and enhance the development of the brain and visual system of the fetus. The results of the present study suggest that fish oil may also be useful for treating (and presumably preventing) postpartum depression. It is important for pregnant and nursing women to use fish oil products that are low in mercury, so as not to expose the fetus and infant to excessive amounts of this toxic metal. Supplementing with alpha-linolenic acid from flaxseed oil or other vegetable oils may not be as effective as using fish oil, because the capacity of the body to convert alpha-linolenic acid to eicosapentaenoic acid and docosahexaenoic acid is limited.

Other treatments that have been successful, in my experience, for treating postpartum depression include 1) intramuscular injections of vitamin B12 (1,000 mcg) and folic acid (2.5 mg) once or twice a week for several weeks and 2) low doses of thyroid hormone when the clinical or laboratory picture is suggestive of hypothyroidism.

Musculoskeletal pain due to vitamin D deficiency

Eleven female asylum seekers from Bosnia, Afghanistan, Somalia, or Albania who were living in Switzerland presented with musculoskeletal pain associated with subnormal serum concentrations of 25-hydroxyvitamin D. Symptoms included bone pain, proximal muscle weakness, change in gait, or fatigue. In all cases, exposure to sunlight was minimal. Treatment in most cases was 300,000 IU of vitamin D3 once a month intramuscularly, plus 1,000 mg/day of calcium and 800 IU/day of vitamin D3 orally. In most cases, symptoms disappeared within one to three months, although one patient needed seven months of treatment.

Comment: Numerous studies over the past ten years have shown that vitamin D deficiency is more prevalent than most doctors realize. Symptoms of vitamin D deficiency include musculoskeletal pain and weakness that may be confused with fibromyalgia or chronic fatigue syndrome. The main contributing factor to vitamin D deficiency is inadequate sunlight exposure. Some people purposely avoid the sun because of fears of skin cancer and photoaging. Others fail to obtain adequate amounts of sunlight exposure because they spend most of their time indoors or because they live in areas where insufficient amounts of sunlight reach the earth's surface (e.g., northern latitudes or cities with tall buildings). Some women cover themselves for religious reasons.

Most people do not require a large amount of sun exposure to achieve adequate vitamin D status. According to Dr. Michael Holick, a vitamin D expert, exposure of the arms and legs or the hands, arms, and face to sunlight for five to 15 minutes, two to three times a week between 10AM and 3PM during the spring, summer, and autumn is usually enough for adequate vitamin D production. People who are obese, elderly, or dark-skinned have a reduced capacity to synthesize vitamin D in the skin.

Vitamin D deficiency should be considered in patients with fatigue or musculoskeletal symptoms who do not obtain adequate sunlight exposure.


Low inositol diet for bipolar disorder

Fifteen patients with bipolar disorder consumed a diet that contained less than ten percent of the usual amount of inositol. Six of the patients were rapid cyclers who had responded inadequately to lithium or valproate in different phases of illness; two were lithium-treated outpatients with residual symptoms; and seven were lithium-treated inpatients with acute mania who had not responded to treatment. A marked reduction in the severity of the disease was seen in ten of the 15 patients within the first seven to 14 days of treatment, including five of six rapid cyclers, four of seven non-responding acute manic patients, and one of two outpatients with residual symptoms.

Comment: One theory to explain the beneficial effect of lithium in the treatment of mania is that the drug depletes inositol by inhibiting inositol monophosphatase. If that theory is correct, then consumption of a low-inositol diet might also be beneficial. Wheat contains large amounts of inositol, so a low-inositol diet would presumably be wheat-free and also free of other common allergens such as legumes and nuts. It is possible that some of the improvement observed in this study was due to the avoidance of allergenic foods, rather than to inositol depletion. I have worked with several bipolar patients in whom consumption of allergenic foods was a clear trigger for their psychiatric symptoms.

In a previous study, supplementation with 6 g/day of inositol improved lithium-induced psoriasis without apparently interfering with the beneficial effects of lithium. In another study of 14 patients with various lithium-related side effects, administration of 3 g/day of inositol relieved the side effects in the majority of cases, while appearing to aggravate psychiatric symptoms in only one of the 14 patients. Thus, it is not clear to what extent inositol exacerbates the symptoms of bipolar disorder. Whether the improvement...
observed in the present study is due to inositol depletion or to the avoidance of allergenic foods, the results suggest that some patients with bipolar disorder respond to dietary modifications. Shalduhana A, et al. Inositol deficiency diet and lithium effects. Bipolar Disord. 2006;8: 152-159.

High iodine intake associated with thyroiditis and hypothyroidism
Salt has been iodized in China since 1996, resulting in an increase in iodine intake throughout the country. In a 1999 study, researchers observed an increase in the prevalence of autoimmune thyroiditis, overt hypothyroidism, and subclinical hypothyroidism with increasing iodine intake in cohorts from three regions of China with different levels of iodine intake: "mildly deficient" (median urinary iodine excretion, 84 mcg/L), "more than adequate" (median, 243 mcg/L), and "excessive" (median, 651 mcg/L). Of the 3,761 subjects enrolled in the original study, 3,018 (80.2%) participated in a five-year, follow-up study. During the follow-up period, among subjects with mildly deficient iodine intake, more than adequate intake, and excessive intake, the cumulative incidence of autoimmune thyroiditis was 0.2%, 1.0%, and 1.3%, respectively; that of subclinical hypothyroidism, 0.2%, 2.6%, and 2.9%, respectively; and that of overt hypothyroidism, 0.2%, 0.5%, and 0.3%, respectively. The differences in incidence for mildly deficient vs. more than adequate or excessive intake were statistically significant for autoimmune thyroiditis (p = 0.01 to 0.03) and for subclinical hypothyroidism (p < 0.001). The authors concluded that more than adequate or excessive iodine intake may lead to autoimmune thyroiditis and hypothyroidism.

Comment: Iodine deficiency remains an important problem in some parts of the world, and iodine intake should be increased in people whose intake is inadequate. High-dose iodine therapy also has a role in clinical medicine, particularly in the treatment of fibrocystic breast disease. However, people taking large amounts of iodine should be monitored for the development of thyroid abnormalities.

N-acetylcysteine for polycystic ovary syndrome
One hundred-fifty overweight or obese infertile women (mean age, 29 years; range, 18-39 years) with polycystic ovary syndrome (PCOS) who had failed to ovulate after treatment...