Omega-3 Fatty Acids In The Treatment Of Glaucoma

What are Omega-3 Fatty Acids

Omega-3 fatty acids, commonly found in fish oil, have been shown to benefit conditions ranging from heart disease to dry eye. Two of the most frequently studied omega-3 fatty acids are docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA). Animal experiments support a role of DHA in retinal health. What about its role in glaucoma?

Evidence that Omega-3 Fatty Acids Can Be Used To Treat Glaucoma:

When injected into the muscles of rabbits, fish oil (DHA and EPA) was shown to reduce intraocular pressure (IOP)\(^1\). As we wouldn’t be injecting omega-3 fatty acids into our muscles, other studies have looked at dietary intake of omega-3 fatty acids in laboratory animals. In mice, at least, a diet rich in omega-3 fatty acids was shown to lower IOP by making it easier for fluid to exit the eye.\(^2\)

In humans the benefit of omega-3 fatty acids is less clear. At least in combination with Vitamins B and E, DHA has been shown to improve visual fields and retinal sensitivity in patients with glaucoma.\(^3\)

Potential Side Effects and Risks of Omega-3 Fatty Acids

The most commonly experienced side effects of oral supplementation with omega-3 fatty acids are “fishy burps”, gastrointestinal distress (stomach upset), and blood thinning. Many omega-3 supplements are now “enteric coated” in order to decrease the risk of the first two annoying side effects. Taking these supplements with meals or storing them in the freezer also helps. With regard to blood thinning, it is important to consult one’s primary doctor (internist or family physician) if already taking blood thinners. For those who are not already taking blood thinners there is very little risk of excess bleeding associated with oral dosages of 4,000mg or less per day.

Recommended Dosage:

In summary, although laboratory animal studies seem to imply a role of omega-3 fatty acids in lowering IOP, the evidence in humans is sparse that oral supplementation with omega-3 fatty acids could benefit those with glaucoma. Nevertheless, there are many other well documented health benefits of omega-3 fatty acids and the risks of taking them are small. In my patients who tolerate it I recommend oral supplementation of omega-3 fatty acids in the range of 1,000-4,000mg per day (divided into 2-3 doses if needed to avoid side effects).

Where To Buy Omega-3 Fatty Acids and Cost:

The price of omega-3 fatty acid supplementation can vary from $5-70 per month depending upon the source, brand and whether or not they are enteric coated. Take note, however, that the quality can vary greatly. To be certain you are getting a high quality product I would recommend you only purchase supplements such as Omega-3 fatty acids from a...
trusted brand such as Nordic Naturals.

References:

