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ω -3 Fatty acids (fish oil) as an anti-inflammatory: an alternative to nonsteroidal anti-inflammatory drugs for discogenic pain †

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Abstract:

Background

The use of NSAID medications is a well-established effective therapy for both acute and chronic nonspecific neck and back pain. Extreme complications, including gastric ulcers, bleeding, myocardial infarction, and even deaths, are associated with their use. **An alternative treatment with fewer side effects that also reduces the inflammatory response and thereby reduces pain is believed to be ω -3 EFAs found in fish oil.** We report our experience in a neurosurgical practice using fish oil supplements for pain relief.

Methods

From March to June 2004, 250 patients who had been seen by a neurosurgeon and were found to have nonsurgical neck or back pain were asked to take a total of 1200 mg per day of ω -3 EFAs (eicosapentaenoic acid and docosahexaenoic acid) found in fish oil supplements. A questionnaire was sent approximately 1 month after starting the supplement.

Results

Of the 250 patients, 125 returned the questionnaire at an average of 75 days on fish oil. Seventy-eight percent were taking 1200 mg and 22% were taking 2400 mg of EFAs. Fifty-nine percent discontinued to take their prescription NSAID medications for pain. Sixty percent stated that their overall pain was improved, and 60% stated that their joint pain had improved. Eighty percent stated they were satisfied with their improvement, and 88% stated they would continue to take the fish oil. There were no significant side effects reported.

Conclusions

Our results mirror other controlled studies that compared ibuprofen and ω -3 EFAs demonstrating equivalent effect in reducing arthritic pain. **ω -3 EFA fish oil supplements appear to be a safer alternative to NSAIDs for treatment of nonsurgical neck or back pain in this selective group.**

Abbreviations

ALA, α -Linolenic acid; COX, Cyclooxygenase; DHA, Decosahexaenoic acid; EPA,

Eicosapentaenoic acid; EFA, Essential fatty acids; FDA, Food and Drug Administration; IL, Interleukins; LOX, Lipoxygenase; MI, Myocardial infarction; NSAIDs, Nonsteroidal anti-inflammatory drugs; PG, Prostaglandin

Keywords

Spine pain; ω -3 EFA; Nonsteroidal anti-inflammatory drugs

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Dr. Maroon and Mr. Bost are stockholders in Inflammation solutions, a dietary supplement retailer.

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