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Case Report

Long standing post-herpetic neuralgia resistant to standard anti-neuropathy medication showing quick dramatic improvement following treatment with sympathomimetic amines

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Summary

Purpose: To determine if treatment with dextroamphetamine sulfate can alleviate severe chronic post-herpetic neuralgia that failed to respond to standard drugs typically used for neuropathy. *Materials and Methods:* An 88-year-old man with a fiver-year history of severe post-herpetic neuralgia pain who had failed to respond to pregabalin, and duloxetine was offered 15 mg of amphetamine salts extended release capsules. Eventually he was increased to 30 mg extended release capsules. *Results:* Within the first month of treatment there was significant relief of his pain with just 15 mg extended release capsule. After two months the dosage was increased to 30 mg extended release capsules and he has had at least a 90% reduction in pain which has lasted now five years. *Discussion:* Not only had this patient failed to respond to standard therapies for neuropathies, but he gained only marginal relief from lidocane patches, hydrocodone, oxydodone (all of which caused nausea), acupuncture, and TENS units. He has had no adverse side effects from the dextroamphetamine sulfate. Though the exact mechanism of action is not known for sure, the main hypothesis for the etiology of the sympathetic neural hyperalgesia syndrome is that the sympathetic nervous system controls cellular permeability, and a sensitive tissue already showing signs of increased permeability allows chemicals and toxic elements to permeate these tissues resulting in inflammation. The permeability problem is further compromised by sympathetic hypofunction. Dextroamphetamine sulfate is thought to stimulate the neurotransmitter dopamine which corrects the problem.

Key words: Post-herpetic neuralgia; Amphetamines; Dextroamphetamine sulfate.

Introduction

The sympathetic neural hyperalgesia edema syndrome is a relatively common condition that is not well known by physicians. It is characterized by pain in various organs and tissues [1]. It has been hypothesized that it is related to a given tissue failing to inhibit infiltration of chemicals from the surroundings that leads to inflammation and pain [2].

Many cases seem to be related to genetic predisposition of certain tissues to have increased permeability and for genetic predisposition to sympathetic nervous system hypofunction [2]. However, it has been shown that certain acquired injuries may lead to increased tissue permeability, and similar to those with genetic predisposition, responds very well to treatment with the sympathomimetic amine dextroamphetamine sulfate [3, 4]. Dextroamphetamine sulfate has also been found to be effective in conditions thought to be associated with increased neural activity, e.g., fibromyalgia [5].

The present case describes an 88-year-old man treated with dextroamphetamine sulfate for severe treatment refractory post-herpetic neuralgia.

Case Report

At age 83, a man developed shingles and unfortunately developed a severe post-herpetic neuralgia. Over a five-year period he failed to gain significant improvement with treatment with pregabalin or duloxetine, lidocaine patches, hydrocodone or oxycodone (both caused nausea also), and acupuncture. At age 88 he became suicidal because he could no longer withstand the pain.

His daughter, who had been treated for years in our practice for pelvic pain and had been treated with dextroamphetamine sulfate with great success, asked if we would be willing to treat her father with the same drug. From meeting other patients in the waiting room who had pain relief in other areas of their body with this treatment she was aware that we offer this therapy and have been successful for various other pain syndromes. Though we had never previously treated a case of post-herpetic neuralgia, we agreed to try this treatment on her father despite his age. He was started on 15 mg dextroamphetamine sulfate extended release capsules in the form of amphetamine salts and within one month of treatment there was significant improvement of the pain without side effects. The dosage was raised to 30 mg after two months and he has had a 90% reduction in pain which has lasted five years

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(now age 93). We offered to raise the dosage slightly more but he was satisfied with his degree of relief so he remained on 30 mg once daily.

Discussion

Post-herpetic neuralgia can be added to the long list of pain syndromes that are refractory to most therapies but respond quickly and efficiently to sympathomimetic amine therapy [2]. Though one may consider giving an 88-year-old man (now 93) a stimulant as somewhat risky, the theoretical risk was justified, in our opinion, since he could no longer live with the pain and no other options were presented to him despite multiple consults with various neurologists and pain specialists.

Because dextroamphetamine sulfate is a schedule II drug, there is some hesitation by some physicians to treat with these drugs, yet for some reason, less resistance to using oxycodone and hydrocodone. In the dosages used, dextroamphetamine sulfate is non-addicting and can be stopped suddenly without withdrawal or other complications except for a return eventually of the condition that is being treated.

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