

# Complete resolution of frozen shoulder syndrome in a woman treated with dextroamphetamine sulfate for chronic urinary urgency

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## Summary

**Purpose:** To evaluate the efficacy of dextroamphetamine sulfate for idiopathic frozen shoulder in a woman being treated for bladder urgency and inability to lose weight despite dieting. **Materials and Methods:** Dextroamphetamine sulfate was initiated at 15 mg extended release capsules increasing to 25 mg extended release capsules to a 47-year-old woman. **Results:** She lost 19 pounds in four months, her bladder urgency disappeared, and she had complete resolution of the idiopathic frozen shoulder problem. **Conclusions:** Idiopathic frozen shoulder syndrome can be added to the long list of conditions that are related to hypofunction of the sympathetic nervous system and all respond to dextroamphetamine sulfate therapy. They gynecologist is more familiar with this syndrome because of it being the main cause of pelvic pain. Thus the gynecologist may become the physician who subsequently treats orthopedic or rheumatological problems or other health issues.

**Key words:** Idiopathic frozen shoulder; Urinary urgency; Obesity; Sympathomimetic amines.

## Introduction

Pelvic pain of bladder origin, or as it is sometimes called interstitial cystitis, is part of a pelvic pain syndrome which includes dysmenorrhea, dyspareunia, mittelschmerz, chronic pelvic pain, and vulvodynia or vulvovaginitis. These conditions are linked by having at the core of the problem hypofunction of the sympathetic nervous system [1]. The sympathetic nervous system controls cellular permeability and hypofunction allows absorption of chemicals and toxic materials into the tissues which evoke an inflammatory response and pain [2]. All these entities respond quickly and effectively to treatment with sympathomimetic amines especially dextroamphetamine sulfate [3, 4]. Interstitial cystitis resistant to standard therapy has been shown to respond very well to treatment with dextroamphetamine sulfate [5, 6].

Despite many articles written about different chronic treatment refractory disorders that respond very well to sympathomimetic amine therapy, most physicians in other fields of medicine seem to be unaware of the condition of sympathetic nervous system hypofunction. Some of these disorders include a variety of chronic gastrointestinal disorders, skin disorders, rheumatologic disorders, and disorders of the nervous system to name a few [1, 2]. Sometimes a woman will seek help from the

gynecologist or gynecologic subspecialist for problems of the pelvis and will not only notice improvement of the pelvic disorder but also some other chronic disorders. Since the gynecologist is the most likely type of physician to treat this disorder referred to as the sympathetic neural hyperalgesia edema syndrome they may inadvertently find that other conditions may respond. The physician should then report these findings so other physicians can benefit from this knowledge.

In this case report, a woman who sought help for refractory urinary urgency and inability to lose weight despite dieting found complete relief of the idiopathic frozen shoulder syndrome.

## Case Report

A 47-year-old woman came in for her annual check-up. She complained of increasing hirsutism, inability to lose weight despite dieting, and urinary urgency. A cystoscopy was negative. She also mentioned that she has had a frozen left shoulder unable to elevate her right arm. Extensive testing revealed no etiology related to ligament, tendon, or muscle damage or inflammation. She had stopped physical therapy one year before because it had not proven to improve her condition.

She showed improvement in her weight symptoms when returning in one month on 15 mg dextroamphetamine sulfate extended release capsules. Since she had no side effects, she was

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increased to 25 mg extended release capsules. Three months later she lost 19 pounds (she was 5'8" and 185 pounds), no longer had urinary urgency, and her idiopathic frozen shoulder syndrome completely disappeared. She had elected not to treat the hirsutism.

## Discussion

Frozen shoulder is a condition in which movement of the shoulder becomes restricted. Primary frozen shoulder infers an unknown etiology [7]. It is commonly a self-limiting condition of approximately 1.3 years of duration though incomplete resolution can occur [8]. Thus it is possible that the frozen shoulder resolved spontaneously and coincidentally with dextroamphetamine sulfate therapy. However, in view of the many other disorders that respond so quickly to this drug after years of not responding to other therapies, it seems likely that the dextroamphetamine sulfate was responsible for her improvement [8]. It is not surprising she lost weight since this drug has proven very effective for women who cannot lose weight despite appropriate dieting [9].

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