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Case Reports

Resolution of pelvic pain related to adenomyosis following treatment with dextroamphetamine sulfate

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Summary

Purpose: To determine if treatment with dextroamphetamine sulfate can reduce pelvic pain that was attributed to adenomyosis. *Materials and Methods:* Dextroamphetamine sulfate was given to a 32-year-old woman who suffered on a daily basis from severe chronic pelvic pain that was not relieved by laparoscopic removal of endometriosis by oral contraceptive and ibuprofen. The adenomyosis was diagnosed by magnetic resonance imaging. *Results:* Within three months the pain was completely gone and has remained absent for six months. *Conclusions:* Dextroamphetamine sulfate relieved pain from adenomyosis similar to its effect on endometriosis.

Key words: Adenomyosis; Chronic pelvic pain; Dextroamphetamine sulfate; Endometriosis; Sympathetic hypofunction.

Introduction

There are various types of pelvic pain including dysmenorrhea, dyspareunia, middleschmertz, chronic pelvic pain, introital pain (vulvodynia or vulvovaginosis), and pelvic pain of bladder origin. Dextroamphetamine sulfate has been found to be a very safe and very effective treatment for all of these disorders [1-5].

For years surgical therapy especially for endometriosis, either through laser vaporization or surgical removal, was the primary treatment [6]. However, even when there is absolute laparoscopic confirmation of absence of return of endometrial implants by repeat laparoscopy, a high percentage of females will experience a return of their pain [7]. In contrast, treatment with dextroamphetamine sulfate provides long lasting relief of pain which rarely ever returns as long as treatment is continued [8]. It is believed that a lot of other chronic treatment refractory disorders, including but not limited to pain, also responds to sympathomimetic amine therapy [9, 10].

The sympathetic nervous system controls cellular permeability. Hypofunction of the sympathetic nervous system may then allow the absorption of chemicals and toxic material into tissues that would normally be impervious which then evokes an inflammatory response, that in turn, leads to pain [10]. The sympathomimetic amine dextroamphetamine sulfate may replace the diminished neurotransmitter or stimulate dopamine and thus correct the permeability defect [10].

Many of the treatments for endometriosis do not work as well for adenomyosis. One possible reason for failure of surgical removal of endometriosis to work or even some medical therapies is because of concomitant existence of adenomyosis. The authors present a case of endometriosis and adenomyosis that showed only temporary relief of pain with surgical removal of endometriosis, but where the woman had extremely good relief from treatment with dextroamphetamine amine sulfate.

Case Report

A 32-year-old woman presented to discuss any options short of the proposed hysterectomy for her severe chronic pelvic pain of five years duration. She had a laparoscopy and was found to have endometriosis. Laser vaporization reduced the pain intensity from a 10 to a 5, but it returned to a full 10 within six months.

Subsequently an MRI study found a thickened junctional zone along the inferior uterine body measuring 14 mm and was thus diagnosed as segmental adenomyosis. She was advised that only a hysterectomy would relieve the pain. Since she had not had any children as yet, she wanted to preserve her uterus.

Despite taking oral contraceptives continually for three months at a time before allowing menses and despite 800 mg ibuprofen every four to six hours, she had pain every day with periods of waxing and waning with most of it left-sided. On 15-mg dextroamphetamine sulfate extended release capsules, the pain markedly improved. An increase in dosage to 30-mg extended release capsules once daily was initiated. Six months following the increased dosage, the woman remained pain-free and does not even require ibuprofen.

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Discussion

Adenomyosis can be added to the list of pain disorders that respond very well to sympathomimetic amines. One could argue that MRI diagnosis may not be the ultimate way to diagnose adenomyosis, but it is the best tool available short of pathological evaluation after hysterectomy.

One could argue that the persistent pain was not from the adenomyosis but merely related to the continued absorption of chemicals and toxins into the pelvic tissues. Nevertheless the presumptive diagnosis and considered etiology for the pain was adenomyosis based on the MRI. Treatment with dextroamphetamine sulfate saved her from having a hysterectomy and no hope for children, except for adoption or surrogacy or embryo transfer into a gestational carrier. Dextroamphetamine sulfate is safe to use during pregnancy in the dosages employed and may even be used to obviate infertility and/or miscarriage in treatment refractory cases [11].

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