

Sympathomimetic amine therapy abrogates severe long-term unexplained abdominal pain and diarrhea (microscopic colitis) – possible infertility implications

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Summary

Purpose: To attempt a new treatment for severe long-standing diarrhea and abdominal pain from microscopic colitis. **Materials and Methods:** Dextroamphetamine sulfate was prescribed to a 42-year-old woman with progressively worsening microscopic colitis. **Results:** Within one month she showed a 90% improvement. **Conclusion:** Dextroamphetamine sulfate immediately caused marked improvement in her diarrhea and pain in one month despite 35 years of suffering.

Key words: Microscopic colitis; Increased cellular permeability syndrome; Dextroamphetamine sulfate; Abdominal pain; Diarrhea.

Introduction

A condition has been described related to increased cellular permeability leading to a variety of medical conditions related to an inflammatory response to unwanted absorption of toxic elements, or muscle dysfunction related to toxic chemicals disrupting skeletal and/or small muscle function [1-3]. This condition was previously referred to as the sympathetic neural hyperalgesia edema syndrome, but is now called the increased cellular permeability syndrome, and it is more common in women [4]. This condition may have an adverse effect on fecundity by causing a constant inflammatory state, and thus the presence of an increased cellular immune response past the normal six-days post-ovulation, making it more difficult for progesterone to stimulate a sufficient amount of immunomodulatory proteins to negate these white blood cells (especially natural killer cells) from causing immune rejection of the fetal semi-allograft [5-9]. There is no test at present to determine when this increased cellular permeability syndrome is contributing to infertility. Certainly, in some instances, even when a condition exists that is very likely to be related to the increased cellular permeability, e.g., pelvic pain, it is possible that correcting other problems can achieve a pregnancy without correcting the permeability defect or negate the heightened activity of the cellular immune system by adding more progesterone [5, 9, 10-14].

Since endometriosis has been associated with infertility, and endometriosis has been associated with increased cel-

lular permeability of pelvic tissues, with dramatic relief by treatment with amphetamine, it would seem reasonable to initiate treatment with dextroamphetamine sulfate initially along with other corrective therapy in women presenting with infertility and pelvic pain [15-17].

Sometimes a woman may present with chronic pelvic pain, Mittelschmerz, dysmenorrhea, and inflammatory bowel disease, e.g., Crohn's disease, with marked improvement of all symptoms following treatment with sympathomimetic amine, especially those containing dextroamphetamine sulfate [18]. Crohn's disease and ulcerative colitis have been found to show complete resolution following sympathomimetic amine therapies despite failure with standard risky and expensive immunosuppressive therapy or surgery [19, 20]. Thus, it would seem reasonable to initiate treatment with dextroamphetamine sulfate for women presenting with infertility, and chronic abdominal pain and diarrhea, that has not responded to standard therapy for inflammatory bowel disease, not only to possibly help correct the infertility, but to relieve the suffering from the colitis symptoms. In doing so, the treating gynecologist will help eradicate more and more types of gastroenterology conditions that respond to sympathomimetic amines, and thus help the gastroenterologist who is likely to see most of these patients, to use this therapy, rather than advise a patient that they just have to live with their problem and suffer, since they cannot seem to find a cure.

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Case Report

A 42-year-old woman presented with infertility and diminished oocyte reserve. In taking her history she had abdominal pain and very frequent diarrhea that started after a trip to Mexico where she developed "tourista". She mentioned that she had been evaluated by over 25 gastroenterologists and no one could establish a diagnosis. The only thing that seemed to diminish the diarrhea episodes were cortisone enemas, but she gained 6.8 kg and had other side effects. She did not feel that the benefits of treatment outweighed the side effects or risks.

Her diagnosis had been microscopic colitis based on colonoscopy and biopsy at a major university medical center. They said it was unusual in people under age 65. They advised her that there is no known treatment. Her symptoms increased over time, so at her initial visit she had a minimum of 15 bowel movements per day with frequent "gas" pains. These pains were so frequent, as was the diarrhea, that she was unable to function properly at her job. She is a hairdresser and would have to frequently excuse herself to defecate while working on a customer.

With just 15 mg of dextroamphetamine sulfate extended release capsules, given as amphetamine salts, her symptoms improved by 90%. She was increased to a 25 mg dosage and she is 98% improved.

She had originally consulted our group because she did want to proceed with donor oocytes, as suggested by two other infertility specialists. Since her fallopian tubes are patent, and the semen analysis was normal, our plan was to determine if she develops a mature follicle, a normal post-coital test, release the oocyte from the follicle, and then start on a combination of vaginal and oral progesterone.

Discussion

It is extremely common for patients suffering from severe abdominal pain or diarrhea for many years to have gone through a multitude of invasive tests, and dangerous therapies, with many side effects, when they could be treated with very effective, very safe, dextroamphetamine sulfate [18-20].

Other than infertility, gynecologists may be consulted because of unexplained abdominal pain and diarrhea where the gastroenterologist has not been able to either diagnose or successfully treat the problem, looking for gynecologic conditions, e.g., endometriosis, or pelvic inflammatory disease.

The majority of publications involving the increased cellular permeability syndrome, and the efficacy of dextroamphetamine sulfate therapy, has been in the gynecologic literature. The gynecologist is considered by many women as their primary physicians. Thus, with the knowledge that, in reality, that this condition and its treatment is not familiar to the large majority of physicians in other specialties, it is proper for the gynecologist to offer this treatment to his/her patients, even if it appears initially to be outside of the scope of the usual gynecologic practice.

Amphetamines, in normal pharmacologic dosages, appear to be safe despite fetal exposure [21]. Thus when faced with inflammatory bowel disease and a patient desiring to

become pregnant, not only is it likely that amphetamines may relieve symptoms, but they may even increase fecundity [6].

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