

## CASE REPORTS

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### Male Anorgasmia Treated with Oxytocin

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#### ABSTRACT

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**Introduction.** This is a case report on male anorgasmia that was successfully treated with oxytocin. Oxytocin is increased during arousal and peaks during orgasm. More recently, a study on humans published in *Nature* has shown its value in social bonding, increasing trust, and enhancing the sense of well-being.

**Aim.** To test the effectiveness of administering oxytocin in a case of treatment-resistant anorgasmia.

**Methods.** The patient underwent a biopsychosocial evaluation by a psychiatrist trained in sexual medicine and sex therapy for male orgasmic disorder, acquired type. Medical conditions, effect of substances, and psychological issues were ruled out. The patient was properly consented to using oxytocin as an off-label trial. Oxytocin was administered using a nasal spray intracoitally because of its ultra-short half-life.

**Results.** Oxytocin was effective in restoring ejaculation.

**Conclusions.** A case of treatment-resistant male anorgasmia was successfully treated with intracoital administration of intranasal oxytocin. IsHak WW, Berman DS, and Peters A. Male anorgasmia treated with oxytocin. *J Sex Med* 2008;5:1022–1024.

**Key Words.** Anorgasmia; Oxytocin; Male Orgasmic Disorder

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Oxytocin is a peptide hormone made of nine amino acids. It is released by the human posterior pituitary gland, and has been associated with the Letdown reflex in lactating mothers, uterine contractions during the second and third stages of labor, in addition to increased levels at orgasm in both men and women [1,2]. Vincent Du Vigneaud, PhD (1901–1978), of Cornell University synthesized artificial oxytocin in 1954 and received the Nobel Prize for chemistry in 1955 for this achievement. More recently, a study on humans published in *Nature* has shown its value in social bonding, increasing trust, and enhancing the sense of well-being [3].

We are reporting on the use of oxytocin in a case of male anorgasmia. The patient is an 82-year-old man who had suffered from male orgasmic disorder, acquired type, at age 78 with no past history of orgasmic problems. He did not meet the Diagnostic and Statistical Manual of

Mental Disorders, 4th Edition criteria for any other psychiatric disorder. The patient has not been on any substances (medications or drugs) that could delay or inhibit his orgasm. The patient's medical condition was stable with a history of diabetes mellitus, coronary artery disease, and a penile prosthesis. A biopsychosocial evaluation was performed by a psychiatrist specialized in sexual medicine and sex therapy. The patient's relationships were evaluated thoroughly. He remained in the same relationship with his wife, the woman whom he experiences both emotional and physical attractions. The patient was tried on a variety of interventions with no response. Initial successful treatment was obtained with dopamine agonists [4,5], sex education, and supportive measures. However, within a few weeks, the patient lost his ability to ejaculate. Growth hormone was tried through an endocrinology consultation and provided only a temporary positive effect. The

patient did not engage in masturbation or sexual intercourse with others.

Using research findings that oxytocin is increased during arousal and peaks during orgasm [6], and that clear dosing guidelines were utilized in clinical trials [3], the patient was tried on intranasal oxytocin. An informed consent was obtained for off-label use of oxytocin nasal spray, with a detailed review of his anorgasmia, potential risks and benefits of proposed treatment, and possible alternatives.

Because oxytocin has an ultra-short half-life of 2–3 minutes, the patient was instructed to use 20–24 IU during intercourse at the point when ejaculation was sought. Following its use, the patient ejaculated regularly (multiple times per week) after sexual intercourse; an effect that is persisting consistently for 8 months until the time of submission of this report. Both the patient and his wife reported a high degree of satisfaction with this intervention.

Oxytocin has been used to facilitate labor induction, for initiation of lactation in women after delivery [7], and more recently in the treatment of autism [8]. Studies on attachment, social bonding, and sexual behaviors in the animal models have pointed to oxytocin as an important mediator [9]. Animal studies pointed to the role of oxytocin receptors in selective serotonin reuptake inhibitors-induced ejaculation delays [10], with evidence of successful reversal using oxytocin in the male rat [11]. Potential side effects of the nasal preparation of oxytocin include runny, stuffy, or irritated nose, watering eyes, headache, uterine bleeding and/or contractions in women, behavioral disturbances, very rarely convulsions (reported rarely with intravenous infusions), and allergic reactions. Although tachyphylaxis (desensitization to the drug effect) has been intermittently reported with the use of synthetic intravenous oxytocin used for labor induction, it was neither reported with the nasal spray when it was used for lactation induction, nor reported in this case.

Whether oxytocin works in anorgasmia by increasing the ability to “fully share oneself” or more plausibly through promoting rhythmic contractility of the penile and pelvic musculature, the exact mechanism of action is awaiting to be discovered. From a clinical standpoint, it seems to have been working for this patient who failed multiple treatment trials. Placebo effects still cannot be ruled out in sexual medicine trials unless the study utilizes the randomized double-blind

placebo-controlled methodology. In order to check for precedence of the use of oxytocin in human male anorgasmia, we scanned the literature using Medline from 1950 to July 2007, and PsychInfo from 1950 to July 2007 covering other languages in addition to English. To our knowledge, this is the first report on the use of oxytocin in the treatment of male anorgasmia. More systematic studies are needed in order to test the effectiveness of oxytocin in a wider range of patients.

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*Conflict of Interest:* None declared.

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