ORIGINAL RESEARCH—PSYCHOLOGY

Foot Orgasm Syndrome: A Case Report in a Woman

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ABSTRACT

Introduction. Spontaneous orgasm triggered from inside the foot has so far not been reported in medical literature.
Aims. The study aims to report orgasmic feelings in the left foot of a woman.
Methods. A woman presented with complaints of undesired orgasmic sensations originating in her left foot. In-depth interview, physical examination, sensory testing, magnetic resonance imaging (MRI-scan), electromyography (EMG), transcutaneous electrical nerve stimulation (TENS), and blockade of the left S1 dorsal root ganglion were performed.
Main Outcome Measures. The main outcomes are description of this clinical syndrome, results of TENS application, and S1 dorsal root ganglion blockade.
Results. Subtle attenuation of sensory amplitudes of the left suralis, and the left medial and lateral plantar nerve tracts was found at EMG. MRI-scan disclosed no foot abnormalities. TENS at the left metatarso-phalangeal joint-III of the left foot elicited an instant orgasmic sensation that radiated from plantar toward the vagina. TENS applied to the left side of the vagina elicited an orgasm that radiated to the left foot. Diagnostic blockade of the left S1 dorsal root ganglion with 0.8 mL bupivacaine 0.25 mg attenuated the frequency and intensity of orgasmic sensation in the left foot with 50% and 80%, respectively. Additional therapeutic blockade of the same ganglion with 0.8 mL bupivacaine 0.50 mg combined with pulsed radiofrequency treatment resulted in a complete disappearance of the foot-induced orgasmic sensations.
Conclusion. Foot orgasm syndrome (FOS) is descibed in a woman. Blockade of the left S1 dorsal root ganglion alleviated FOS. It is hypothesized that FOS, occurring 1.5 years after an intensive care emergency, was caused by partial nerve regeneration (axonotmesis), after which afferent (C-fiber) information from a small reinnervated skin area of the left foot and afferent somatic and autonomous (visceral) information from the vagina on at least S1 spinal level is misinterpreted by the brain as being solely information originating from the vagina. **Waldinger MD, de Lint GJ, van Gils APG, Masir F, Lakke E, van Coevorden RS, and Schweitzer DH. Foot orgasm syndrome: A case report in a woman. J Sex Med 2013;10:1926–1934.**

Key Words. Spontaneous Orgasm; Foot; Vagina; C-fibers; Axonotmesis; TENS; S1 Dorsal Root Ganglion Blockade; Low Level Laser Therapy; Laser Phototherapy

Introduction

In general, people are attracted to nice legs and feet. The foot is an erotic symbol, variably appreciated by different people [1]. Erotic thoughts and feelings about feet may become intentionally accentuated by fashion and the wearing of shoes with high heels, providing a position of the foot that resembles its position during (female) orgasm when feet and toes may automatically go into plantar flexion resulting in arching of the foot and curling of the toes [1,2]. When sexual arousal becomes more dependent on looking to or caressing someone's feet, it is called foot fetishism [3]. In decerebrated female cats, stimulation of the perivulvar skin, vaginal wall, or cervix induces hind limb extention [4] and brief (<1 second) vaginal probing produces a long-lasting (>1 minute) contraction of the triceps surae muscles [5], suggesting a genital–hind limb muscle relationship, mediated by the pudendal nerve for better positioning of the female cats hind limbs during copulation [4]. In society, special attention is paid to the physical relation between foot and pleasant or even sexual feelings by different forms of foot massage. Currently, the association of feet with sexual attraction and eroticism has been explained in terms of psychology and sociology [1]. However, an underlying neurobiological theory of a possible foot–genital relationship has so far not been formulated.

In the current article, we describe a female patient, who was referred for a diagnostic workup and treatment of an unknown and peculiar complex of symptoms: she complained of orgasmic feelings that spontaneously originated in her left foot. Classical clinical approach combined with application of transcutaneous electric nerve stimulation (TENS) and existing information about axonotmesis led us to postulate an explanation for a possible neurobiological association between the left foot and the genital region of this female patient. The patient provided written informed consent for publishing her case report.

Case Report

Mrs. A is a 55-year-old woman, daughter of a Tanzanian mother and a Greek father, living in the Netherlands for 34 years. After a laparoscopic cholecystectomy in November 2008, complicated by a leak of bile into the abdomen, resulting in sepsis and respiratory insufficiency, she stayed at the intensive care unit and department of surgery of an academic hospital for about 3 weeks. After extubation, she complained of strange sensations (tingling, burning feelings) in her left foot. On examination by a neurologist, hyperpathia and dysesthesias of the left foot up to the level of the ankle were diagnosed. There was no decrease in muscle strength nor was there back pain. Gnostic sensitivity was intact and reflexes were normal, except for a diminished achilles tendon reflex (R -3, L -4), on both right and left foot. Throughout 2009, these sensations remained present in the same intensity. In February 2010, amitriptyline 50 mg/day was prescribed to ameliorate her dysesthesias. Due to a lack of clinical effect and to adverse effects (dry mouth and fatigue), amitriptyline was discontinued. In June 2010, paroxetine 20 mg/day was prescribed, but discontinued after a month due to its adverse effects. Notably, within 2–3 days after initiation of paroxetine, Mrs. A felt spontaneously occurring orgasmic sensations in her left foot. These sensations had a lancinating character running from her left foot via her left calf to her vagina, and her head, though the latter with lesser intensity. These unwanted sensations felt like a real orgasm, of short duration (about 5–6 seconds), in absence of sexual desire or sexual thoughts. The orgasmic sensations were often accompanied by vaginal lubrication and urinary incontinence. She did not experience loss of consciousness during the orgasmic sensations. Mrs. A felt very embarrassed by these attacks and was worried about recurrences. Regular sexual contact with her husband continued at a frequency of about three times per week.

As an epileptic nature of her complaints was considered, the neurologist performed additional investigations. Magnetic resonance imaging (MRI)-scanning of the brain, and three electroencephalograms, taken on different occasions, were unremarkable. A somato-sensory evoked potential (SSEP) of the left and right nervus suralis showed good reproducible, well-formed SSEPs without latency time differences in dermatome L5 but with an attenuated conduction velocity at S1 (left-sided) compared with that of S1 (right-sided). However, these latter differences were too small for firm conclusions.

Monitoring of skin temperature showed normal values for heat thresholds at the plantar side of the right foot and pain perception for cold/heat was intact. Pain threshold for cold/heat was slightly diminished at the plantar side of the left foot with hyperesthesia and rapid development of pain.