

A Case of Phantom Testicular Pain

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ABSTRACT

Phantom sensation or pain is the persistent perception that a body part exists or is painful after it has been removed. Although limbs are most commonly affected, phantom sensation or pain may appear in virtually any part of the body, somatic or visceral, that is accessible to sensory perception. The following is a case of phantom testicular pain that presented in a young man 18 years after bilateral orchiectomy.

INTRODUCTION

“One might say that a phantom limb is a part of the self, poorly or incompletely forgot; an obliteration not yet registered in the corporeal world. Once the physical form has changed, the memory of a prior self becomes indistinct over time as the body reconciles itself to its new body shape. The body is suspended between a long-acquired memory and a newly acquired need to forget. The dysfunctional conversation that the body is having with its absent limb gives rise to fanciful forms, distortions, enigmatic sensations and eventually, the patient hopes, silence.”¹

Phantom sensation or pain is the persistent perception that a body part exists or is painful after it has been removed. It can occur from as early as 1 week after removal of the body part to as late as 40 years later.^{2,3} Although limbs are most commonly affected, phantom sensation or pain may appear in virtually any part of the body, somatic or visceral, that is accessible to sensory perception. It has been described in many body parts including the tongue,⁴ bladder,⁵ breast,^{6,7} rectum,⁸ and penis.⁹ Phantom

FOCUS POINTS

- Although limbs are most commonly affected, phantom sensation or pain may appear in virtually any part of the body, somatic or visceral, that is accessible to sensory perception.
- Phantom pain has been described in many body parts including the tongue, bladder, breast, rectum, and penis. Phantom pain in the genital region is particularly rare.
- The pathophysiologic mechanism of phantom pain is not well understood, though the dominant view holds that it is created by activity in the parietal sensory cortex that formerly subserved somatosensation in the amputated part.
- Although physicians believe that there are effective treatments for phantom pain, <10% of phantom pain patients receive relief with prescribed medication.
- Further study into the etiology, mechanism, and treatment of phantom pain is necessary in order to create an evidence-based treatment approach and subsequently reduce the unnecessary suffering caused by this elusive clinical syndrome.

pain in the genital region is particularly rare. The following is a case of phantom testicular pain that presented in a young man 18 years after bilateral orchiectomy.

CASE REPORT

Mr. C, a 33-year-old domiciled employed African-American male with a history of depression who sustained a bilateral orchiectomy after severe trauma to his groin at 15 years of age, presented to our emergency department for complaints

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of severe pain in the area where his testicles used to be. After his bilateral orchiectomy, the patient was free of sensation or pain in this area for 18 years. Seven months prior to his emergency department presentation, the patient began to feel a faint sensation in his “testicles,” which evolved into pain shortly thereafter. The patient was aware that he did not have testicles and was confused at having sensory experiences as if he did. The patient described the pain as a bilateral burning, tingling, and warm sensation. The pain was episodic in nature, would occur several times per day, and would last on average 1–2 hours per episode. The severity of the pain was 6–8 out of 10 on the pain scale, but rose to 10 out of 10 on the day he presented to the emergency department. Motion and touch exacerbated the pain, whereas strong pressure to the area attenuated it. The pain could be reproduced by pressing on several trigger points on the lateral scrotum. It was not associated with urination, defecation, coughing, or temperature changes. Physical exam of the empty scrotal sac was unremarkable. Urologic and musculoskeletal examinations were likewise unremarkable. The patient’s admission labs were within normal limits and scrotal infection was ruled out, including herpes zoster. The patient was not immunocompromised. Spinal magnetic resonance imaging ruled out disc herniation, as radiculitis is one of the most common causes of scrotal pain. Computerized axial tomography and ultrasound showed absence of testes, but were otherwise unremarkable. Referred pain to the “testes” caused by a ureteral stone was also ruled out, as were other common etiologies of scrotal and testicular pain.¹⁰ By diagnosis of exclusion, the patient was believed to have developed phantom testicular pain 18 years after removal of his testes.

DISCUSSION

Unlike pain which serves as a warning of bodily injury, phantom pain has no “ulterior motives,” prophylactic purpose or obvious evolutionary significance. Psychodynamic theory suggests that phantom pain may represent an important unconscious defense, through denial, against the loss of bodily integrity and castration anxiety.¹¹ When the lost body part is genital in origin, castration anxiety becomes castration reality, thereby heightening the need for such a defense.

The pathophysiologic mechanism of phantom pain is not well understood, though the dominant view holds that it is created by activity in the parietal sensory cortex that formerly subserved somatosensation in the amputated part.¹² In the sensory homunculus of Penfield and Rasmussen,¹³ the geni-

talia are depicted on the medial surface of the hemisphere, in the most inferior position, just posterior to the region of the toes. In their electrical exploration of the human cortex, sensory responses referred to the genital region were rare.

In patients whose phantom pain increases in severity or begins a long time after removal of the affected body part, a differential diagnosis must be entertained. In a patient with a history of depression, a psychotic etiology of the pain must be considered. Although our patient did not have evidence of other psychotic features, it is possible that his “testicular” pain was actually a somatic delusion resulting from a mood disorder with psychotic features. The distinction between phantom pain and somatic delusions is itself questionable, as phantom pain is arguably a “hallucination” of a body part that is no longer there.

The treatment of phantom pain is particularly challenging. Although physicians believe that there are effective treatments,¹⁴ <10% of phantom pain patients receive relief with prescribed medication.¹⁵ Lack of clinical trials and evidence-based treatment guidelines further complicate this problem.¹⁶ Further study into the etiology, mechanism, and treatment of phantom pain is necessary in order to create an evidence-based treatment approach and subsequently reduce the unnecessary suffering caused by this elusive clinical syndrome. **PP**

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