#### Case Report

# Phantom Pain after Robotic Cystoprostatectomy for Bladder Pain Syndrome

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# ABSTRACT

Phantom pain is a syndrome in which a person experiences pain when that part of the body, external or internal, is no more physically present following an accident or operation. There are very few reports of phantom bladder pain. Here, we present a case of a 29-year-old male with phantom pain following three months of robotic cystoprostatectomy for bladder pain syndrome.

Keywords: Cystectomy, Interstitial cystitis, Phantom bladder, Rare syndrome

# **CASE REPORT**

A 29-year-old male presented to the Department of Urology with chronic pain in pelvis, suprapubic and penile region for the past 13 years. He also complained of increased frequency and urgency with occasional strangury since the age of 16 years. The pain would be at its peak at the time of bladder filling and he had learnt to relieve his pain by evacuating his bladder. He experienced an intense pain at the time of erection which would get worse on ejaculation. In addition, patient had colicky abdominal pain suggestive of intestinal origin. Initially, he was treated with antimuscarinics, alfa blocking agents and urinary alkalizers. He received prolonged courses of antibiotics including antitubercular agents without any benefit. He then underwent cystoscopy and Transurethral Resection of the Prostate (TURP) for what was thought to be an infected obstructing prostate gland. After this, he underwent neuromodulation without much benefit. Intravesical Botox neurotoxin was also used on two occasions without any benefit. In the year 2011, he underwent augmentation cystoplasty, which did not yield any benefit in terms of pain or frequency.

At the time of presentation to us in 2016 January, he used to pass urine every 20-30 minutes round the clock. The pain did not respond to gabapentin and its derivatives. In addition, had episodes of subacute intestinal obstruction requiring hospitalisation and laparoscopic adhesionolysis for the same. Patient was investigated for bladder pain syndrome. Urine routine and culture were normal. Patient underwent Robotic assisted cystoprostatectomy, adhesiolysis with ileal conduit urinary diversion. During the first three months postoperatively, the patient had no pain and he was satisfied with the ileal conduit urinary diversion. At the end of three months, he started having the same pain at the tip of penis and lower abdomen, which he had learnt to reduce by passing urine preoperatively. He scored the continuous pain as 6 on a Visual Analog Scale (VAS) and scored the intermittent paroxysmal pain that lasted 30-40 minutes as 8-9. Initially, he responded to tramadol but slowly the intensity of pain increased and did not even respond to high doses of gabapentin and amitriptyline. Patient underwent dorsal penile nerve and genitofemoral nerve block but to no relief. Following this a ganglion impar and superior hypogastric plexus block was done which failed in relieving the pain. Patient was started on fentanyl patch 25 microgram alternate day and underwent transcutaneous electrical nerve stimulation for six months but with little relief of symptoms requiring frequent injectable analgesics.

### DISCUSSION

The etiology of phantom pain is still obscure, though various theories exist [1]. Phantom bladder pain, though a rare phenomenon has been previously reported [2-5]. It is described in patients undergoing cystectomies and after spinal cord injuries as lower abdominal pain/discomfort with sensation of full bladder. Some patients also describe pain which increases with a desire to micturate [3].

While phantom pain of entire ureter is known and is difficult to manage phantom pain from other organs, including bladder, are very uncommon [2-5]. The first case was reported by Arcadi JA et al., in 1977 where 60-year-old women with total cystectomy reported intense urge to void from a bladder that had been removed [2]. Brena SF et al., reported phantom pain following cystectomy for chronic kidney and urinary tract infection where patient had 75% reduction in pain with lumbar sympathetic blocks and transcutaneous electrical stimulation [3]. Another case by Fonseca R et al., reported phantom bladder pain in 70-year-old men who underwent radical ureterocystectomy, radical prostatectomy and bilateral orchiectomy [4]. Park KE et al., reported a 59-year-old male who developed phantom bladder pain two years after cystectomy, which was successfully managed with sympathetic ganglion block [5]. In the present case, patient started phantom pain three months after the surgery and we were struggling to provide long-term benefits in this young adult patient.

In the present case, the patient was explained about the consequence and prognosis of cystectomy in detail and was done in view of end stage bladder with small capacity and resistant painful symptoms. For the treatment of chronic pain of various origins, the blockade of nervous transmission through sympathetic nervous system has been proposed [6,7]. Superior hypogastric plexus transmits painful stimulations from bladder, which is located in L5 lower third and S1 upper third, near sacral promontory and common iliac veins bifurcation [8,9].

# CONCLUSION

This case merits reporting as there are very few case reports on this occurrence.

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