

An Alprostadil Intracavernosal Injection Leading to a Psoas Muscle Abscess

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Introduction: Alprostadil is a synthetic prostaglandin E1 that can be self-administered via intracavernosal injection as a vasodilatory treatment for erectile dysfunction. The psoas muscle has close anatomical relationships such as to the ureters and renal pelvises, and is vulnerable to infection from regional structures. Lumbar artery derivatives supply the muscle. Primary psoas abscess is often associated with trauma, while Crohn's disease is linked to secondary abscess.

Case Presentation: A 59-year-old male presented with a three-week history of fevers, chills, and body aches. Eight months prior, the patient had undergone laparoscopic prostatectomy with bilateral pelvic lymph node dissection and nerve sparing as prostate cancer therapy. Since, the patient had reported stress incontinence with heavy lifting but denied hematuria, dysuria, flank pain, or testicular pain. The patient was diagnosed with erectile dysfunction related to prostatectomy and received intracavernosal alprostadil and combination treatment with sildenafil six months. Imaging revealed a loculated, peripherally-enhancing fluid collection in the hemipelvis along the inferior margin of the right psoas muscle. Blood and urine cultures were negative. An abscess aspirate sample revealed methicillin-sensitive *Staphylococcus aureus*. The patient was treated with cefazolin 2g IV every eight hours for six weeks.

Discussion: The case offers an example of intracavernosal injection of alprostadil precipitating psoas muscle abscess, as opposed to more common cavernous or penile abscesses. Psoas abscess can arise from contiguous spread from adjacent structures or by the hematogenous route from a distant site. This case highlights the importance of considering intracavernosal injections as potential local introduction mechanisms for psoas infection.