



CASE REPORT

Pyomyositis: A Complicated and Curious Case Report

Jinendra Satiya^{1*}, Jacqueline Mulee¹, Daniel Baldor¹, Jason Yarsley¹, Daniel Lichtstein¹

¹University of Miami Miller School of Medicine, Miami, United States of America

*Corresponding Author: Jinendra Satiya, Email: jinen19@gmail.com

ARTICLE INFO

Received: 2018-05-31
Accepted: 2019-02-10
Published: 2019-02-30
Volume: 4
Issue: 1

Conflicts of interest: None
Funding: None

Key words: Urinary Tract Infection (UTI), Prostatic Hypertrophy, Instrumentation, Pectineus Muscle Abscess, Obturator Externus Muscle Abscess, Pyomyositis

ABSTRACT

Introduction: In the elderly (over the age of 50), the risk of urinary tract infections is estimated at 8% per year in men. Anatomic abnormalities such as prostatic hypertrophy, leading to urinary retention is considered as the main reason. Pyomyositis is an uncommon condition of optical urethrotomy, especially in patients who have received local radiation therapy in the past. Till date no cases of pectineus muscle abscess and only two cases of obturator externus muscle abscess have been reported in the literature, with only one developing as a result of genitourinary intervention such as urethrotomy. **Case presentation:** Here we are presenting a case of a very unusual and serious complication in an elderly man presenting with urosepsis several months after undergoing urethrotomy. **Conclusion:** Elderly men have an increased risk of sepsis, higher than that in women with UTI.

INTRODUCTION

Urinary tract infection (UTI) is one of the most commonly diagnosed infections in older adults. In the community-dwelling elderly, UTI risk has been estimated at 8% per year in men without the permanent catheterization. Though the incidence of UTI in men is remarkably less when compared with women of all age groups, the incidence of UTI increases in men over the age of 50 (1). Such increase is mainly because of increase in incidence of anatomic abnormalities, mostly prostatic hypertrophy, leading to urinary retention (2). The European Association of Urology views Urinary tract infections (UTIs) as a complicated situation in men when they are associated with urologic risk factors such as prior urologic surgery, ureteral stricture, or permanent obstruction, as was the case in our patient (3).

CASE PRESENTATION

A 92 year-old man with a previous history of prostate cancer, transitional cell carcinoma of

the bladder, and recurrent urethral stricture along with other complications such as fever, weakness, and urinary incontinence. He was also reported to have transurethral resection, prostatic seed implantation, dilation of the bladder neck and most recently (three months prior to this presentation) an internal urethrotomy.

Upon presentation, he was observed to be relatively hypotensive with a blood pressure of 100/70 mm of Hg and was believed to have urosepsis. He was initially observed under ampicillin treatment. During observation, his urine was found to be infected with *Enterococcus faecalis*. However, his temperature was constantly rising up to 101°F, even after 72 hours of antibiotics. Although there was improvement in urinary symptoms, he began complaining about the right hip pain on the third day at hospital.

Tests

Computed tomography scan of the right hip demonstrated a 6.5 cm right adductor muscle ab-

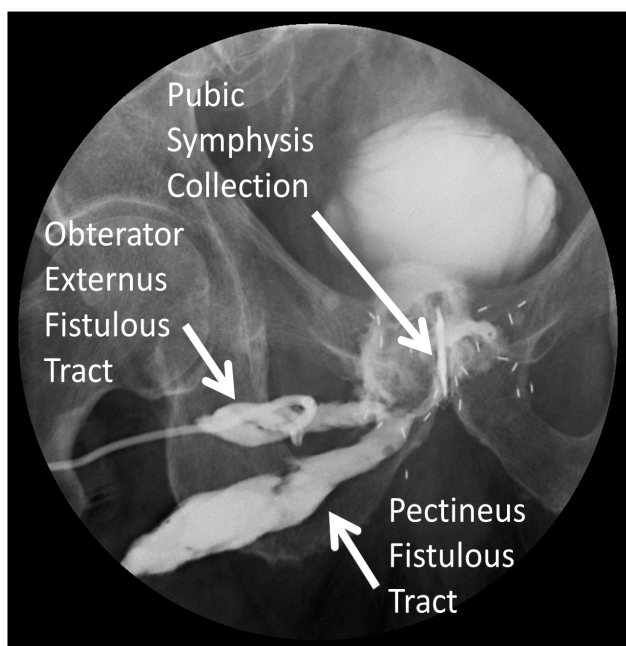


Figure 1. Abscessogram demonstrating the fistulous tract and communication with the pubic symphysis



Figure 2. Radiological anatomy of the inner thigh (Abbreviations; OE: Obturator externus muscle; P: Pectineus; Q: Quadriceps femoris; I: Obturator internus; G: Gluteus Maximus; IP: Iliopsoas)

cess which was subsequently drained under radiological guidance.

The white blood count was $27,000/\text{cm}^3$ and a blood culture was infected with *Bacteroides caccae*. Following such complications the antibiotic regimen was changed to piperacillin and tazobactam. A percutaneous drain left in place, subsequently drained clear yellow fluid. Analysis of the fluid confirmed that the drainage was actually urine. Further evaluation of the pus with an abscessogram revealed the fistulous communication between the prostatic urethra and the right pectineus and obturator externus muscles.

The symphysis pubis was found to be filled with urine which was a highly unusual presentation. The consulted urologist recommended a conservative management with antibiotics, and the patient was discharged with a drain in place anticipating spontaneous closure. The patient was examined and found to be doing well at the one month follow-up which included complete resolution of the abscess and closure of the fistula.

DISCUSSION

Based on the study of literature, this study appears to be a rare complication of instrumentation to the genitourinary tract. Till date, only two cases of obturator externus muscle abscess have been reported in the literature, with only

one developing as a result of genitourinary intervention such as a urethrotomy (4,5). However, no cases of pectineus muscle abscess have been reported in the literature to date. Pyomyositis is an uncommon but possible complication of optical urethrotomy, especially in patients who have received local radiation therapy in the past (4). Alternatively, fistula development into the pubic symphysis is a key complication associated with significant morbidity and mortality (6).

A high index of suspicion must be maintained for infection outside of the genitourinary tract in previously irradiated patients presenting with persistent fever especially after having undergone treatment of bladder neck contracture or urethral stricture. In our patient, pyomyositis of the right obturator externus and pectineus muscles was the source of hip pain and fever, and responded appropriately to percutaneous drainage and antibiotics. Although, surgery for urosymphyseal fistulas can lead to an immediate and dramatic improvement in symptoms (6).

CONCLUSION

Men of all ages who are suspected with UTI should be considered as having a possible complicated UTI. Elderly men have an increased risk of sepsis, higher than that in women with UTI. Hence, elderly men presenting with urosepsis in

the context of prior instrumentation, radiation, or other anatomic abnormalities (i.e. stricture) should alert the clinician about the possibility of a complicated UTI.

AKNOWLEDGMENTS (FUNDING SOURCE)

NONE

AUTHOR CONTRIBUTIONS

All authors equally contributed in this study.

CONFLICT OF INTEREST

NONE

ETHICAL STANDARDS

NONE

REFERENCES

1. Rowe T, Juthani-Mehta M. Urinary tract infection in older adults. *Aging Health*. 2013;9(5):519-528.
2. Schaeffer A, Nicolle LE. Urinary Tract Infections in Older Men. *The New England journal of medicine*. 2016;374(6):562-571.
3. Tan C, Chlebicki M. Urinary tract infections in adults. *Singapore Medical Journal*. 2016;57(9):485-490.
4. Winter M, Sapre N, Ischia J, Appu S. Obturator externus muscle abscess: an unusual complication post-optical urethrotomy, *ANZ Journal of Surgery*. 2012;82(1-2):85.
5. Fowler T, Strote J. Isolated obturator externus muscle abscess presenting as hip pain. *The Journal of Emergency Medicine*. 2006;30(2):137-139.
6. Bugeja S, Andrich DE, Mundy AR. Fistulation into the Pubic Symphysis after Treatment of Prostate Cancer: An Important and Surgically Correctable Complication. *The Journal of urology*. 2016;195(2):391-398.