



Incarcerated Gangrenous Penis from Elastic Rubber Band in a Patient with Alzheimer's disease

Werachai Supitak M.D.

Abstract

Depressive symptoms and feeling of guilt are quite common in the course of Alzheimer's disease. A case of a 72-year-old man with Alzheimer's disease and LUTS, who presented with elastic rubber band constricting the base of his penis result to gangrenous penis. Not only partial penectomy and medical treatment for BPH; but also psychiatrist's consultation and follow up can accomplish management in this case.

Keywords: Incarcerated gangrenous penis, Depression, BPH, Alzheimer's disease

Introduction

It is now appreciated that some degree of depressive symptoms; anxiety and apathy are quite common in the prodrome and course of Alzheimer's disease. Important symptoms include the presence of feeling of guilt, loss of enjoyment and suicidal idea. Most Alzheimer patients often suffer from LUTS of BPH disease. Doctors who treat these patients should be aware of guilty feelings result from lower urinary tract symptoms.

Case presentation

A 72 -year-old Thai man presented to emergency room of Trang hospital with a elastic rubber band strangulating the base of his penis for more than 72 hours. His penis became dry gangrene. He had a 5-year history of Alzheimer's disease and was currently under therapy. He suffered from his urge incontinence and voiding difficulty resulting from BPH. He concerned the feeling of guilt of uncontrollable voiding more than urinary retention.

At emergency room; his penis became gangrene and his bladder was full. His BUN was 118 mg% and blood creatinine was 12.3 mg%.

Suprapubic cystostomy was done and proper antibiotic was started. Psychiatrist was consulted. Three days later, serum BUN and creatinine returned to normal. Partial penectomy was performed. Using alpha-blocker and antimuscarinic drug could improve voiding difficulty and urge incontinence after operation.

Discussion

Since 1755, penile incarceration has been reported. The largest series reports were by Dakin in 1948.[1] Metallic and nonmetallic objects like wedding ring,metal plumbing cuff,plastic bottleneck have been reported in various literatures.[2,3,4] Bhat Al et al. categorized penile incarceration into 5 grades.[5]

Grade 1: Edema of distal penis, no evidence of skin ulceration or urethral injury

Grade 2: Injury of skin and constriction of corpus spongiosum but no evidence of urethral injury. Distal penile edema with decreased penile sensation.

Grade 3: Injury to skin and urethra but no urethral fistula. Loss of distal penile sensation.

Grade 4: Complete division corpus spongiosum leading to urethral fistula and constriction of corpus cavernosa with loss of distal penile sensation.

Grade 5: Gangrene,necrosis or complete amputation of distal penis.[5]

Initial treatment of urinary retention is the first step. If the urethra is intact, a Foley catheter is recommended for grade 1 and grade 2. While suprapubic cystostomy is recommended for grade 3, grade 4 and grade 5.[1] In this patient, his penis was gangrene and partial amputation of the penis was done. Alpha blocker and antimuscarinic drug were used for controlling LUTS. Because of depressive disorder in Alzheimer's patient, he often has feeling of guilt to his uncontrollable voiding resulting from LUTS. Psychiatrist consultation and his family are important keys in the success of management.

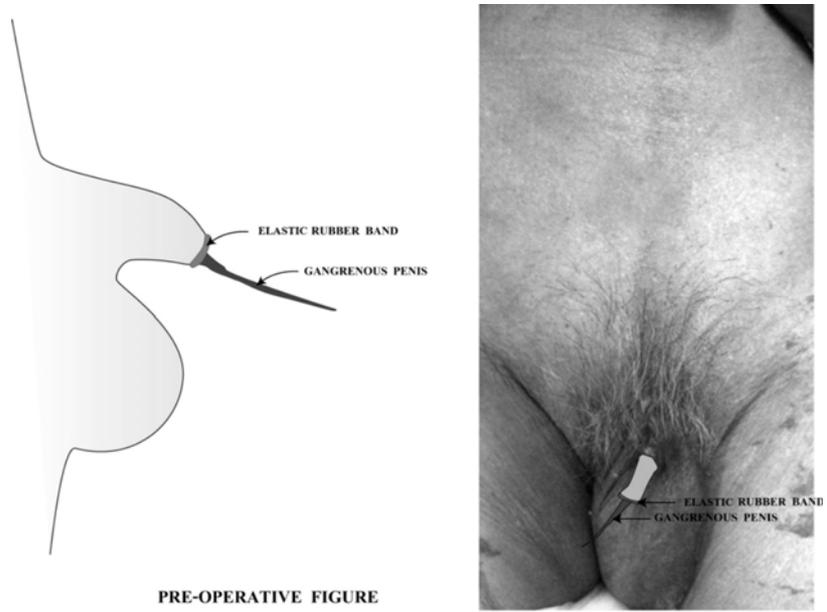


Fig. 1



Fig. 2 Post-operative figure (S/P suprapubic cystostomy and partial penectomy)

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