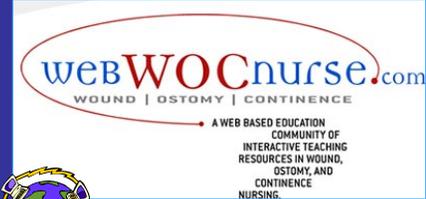


Partial Thickness Wound Resulting from Use of a Penile Clamp to Control Urinary Incontinence in a Patient with Radical Prostatectomy

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Purpose

- ❖ Identify the role of penile clamps in the management of urinary incontinence,
- ❖ Describe criteria for patients who may use penile clamps,
- ❖ Discuss the management of a partial thickness wound resulting from use of a penile compression device.



Are Penile Clamps Safe ?

Safety issues reported when using penile clamps include:

- compromised circulation to the penis,
- urethral strictures,
- skin breakdown on the penis and,
- **potential of partial thickness wound of the scrotum.** (reported in this poster).



How can we increase safety ?

1) Patient Selection:

good manual dexterity,
normal circulation,
sensation in the penis,
normal cognitive function.

- 2) Proper Selection & Use of the Clamp,
- 3) Evaluation & Follow-up with a Qualified Health Care Professional



Case Report: Partial Thickness Wound

Demographics: A 83-year-old male, married, active professional who travels internationally as a public speaker presents at the Continence Clinic with a partial thickness wound of the scrotum secondary to trauma from a penile clamp. (He refused photos.)

UI History & Presenting Problem: 11 year duration following radical prostatectomy, stress and urge urinary incontinence diagnosed. Leakage is continuous with increase in volume. Uses 4-5 moderately absorbing pads daily. Began using a penile clamp (Cunningham[®]) 2 months ago for social situations. Scrotal skin irritation reported after 1 month – repetitive friction and blunt trauma occurred when sitting and walking resulting in a partial thickness wound of the scrotum by the 2nd month.

External Passive Compression of the Urethra



AKA, penile clamp, is utilized to obstruct the flow of urine in the male by compressing the penis and eliminating or reducing episodes of urinary incontinence between voluntary voidings. These devices were first mentioned in the literature in 1750, and it may be surprising to learn that they continue to garner a place in the management of incontinence two and a half centuries later.

How Does it Work ?

The clamp is positioned halfway down the shaft of the penis and then tightened. It is intended to be applied with the least amount of pressure necessary and released every 2 hours to avoid circulatory problems in the penis.

Why would a Man Choose this Option ?

Penile clamps are easy to use, readily accessible, low profile and inexpensive. They are available without a prescription, in several styles and cost between \$45-75 (Internet search in March, 2005). They are an immediate intervention for temporary situations, like swimming or exercising. They also indicate the desperation and frustration felt by patients as they search for solutions to control urinary incontinence and increase quality of life.

Interventions

Self Care Interventions: Gauze, tape and/or toilet paper had been used to protect the scrotum from the clamp. The patient had also used "antibiotic ointment" on the ulcer.

Clinic Wound Assessment: A partial thickness wound of the right anterior scrotum is assessed. The wound measured 1.2 x .06cm with scant amount of serosanguinous drainage, wound base 50% fibrin and 50% pink dermis, no periwound erythema.

Intervention: The patient refused any adhesive products near the clamp or scrotum & continued to use the clamp. Therefore, a no sting skin barrier spray was selected for use. The rationale for this choice included the need for a barrier that dried and was not greasy, yet did not cause additional pain. The spray form was selected as it was more cost-effective for this situation. Non-adhesive thin foam was used to wrap the clamp and separate it from the wound/scrotum. No specific cleansing protocol was recommended. The patient showered daily and applied the barrier, then attached the clamp and wrapped it with the thin foam. The patient and WOC Nurse then began an exhaustive search for other clamps that would not damage the skin. Six clamps were trialed and none found more satisfactory than the one currently in use.

Return to Clinic Evaluation in 1 week: The foam failed to stay in place despite numerous adaptations. However, the partial thickness wound healed with skin barrier spray alone. Clamp positioning continued to be a problem, but no further injury occurred.

Additional Rx and Outcomes: Subsequent care included biofeedback, electrical stimulation, pelvic muscle exercises and diet; minimal improvement in SUI or Urge UI symptoms were achieved. Artificial urinary sphincter was performed and after 6 months, he is 60% continent, wearing absorbent pads for containment.

Conclusion

An external compression device to control SUI or urge UI in males continues to be an option in management, yet presents risks. When partial thickness wounds occur, a protectant skin barrier is recommended that does not sting, is not greasy and is easy to use. In addition to skin care and wound treatment, improvements in clamps design is needed to prevent traumatic injuries. Health care professionals should assess skin on the penis and scrotum during visits if the patient is using a penile clamp in order to offer skin care strategies. Query about clamp release interval and good skin care is also critical. The authors, however, would recommend alternative approaches to management that include external collection devices.

References:

- Grise, P. & Thurman, S. (2001). Urinary incontinence following treatment of localized prostate cancer. *Cancer Control* 8(6): 532-539. retrieved on 3/20/05 from http://www.medscape.com/viewarticle/423513_print
- Madjar, S., Raz, S. & Gousse, A.E. (2001). Fixed and dynamic urethral compression for the treatment of post-prostatectomy urinary incontinence: is history repeating itself? *J. Urology*, Aug 168(2):411-5.
- Moore, K.M., Schlieman, S., Ackerman, T., Dzus, H.Y., Metcalfe, J.B. & Voaklander, D.C. (2004). Assessing comfort, safety, and patient satisfaction with three commonly used penile compression devices. *Urology* 63(1) 150-154.
- Newman, D.K. (2004). Incontinence products and devices for the elderly. *Urologic Nursing*, 24(4), 316-333.