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Padding the Truth: Myths about Urinary Incontinence

Let's be honest—incontinence is a **REALLY** big deal. It's embarrassing and hard to talk about. Being continent is something most people take for granted — until they can't control it anymore!

There are 25 million incontinent people in the US, including the majority of the spinal cord injury

population¹. Bladder control is common with SCIs because most spinal injuries disrupt communication between the bladder and the brain.

Depending on the type of incontinence you have - the management options are different. And you wouldn't believe the amount of hogwash spinning around out there about incontinence management. So in the interests of dispelling a few myths – let's talk about your options and their potential benefits and complications. Products fall into three broad categories – absorbents, indwelling catheters and external collection products.



Absorbents

Absorbent products are made of hydrophilic materials which absorb urine and a hydrophobic external layer to hold the moisture inside and prevent leaks. The main positives for diapers are that they are relatively cheap, readily available and easy to use.

The price of most superabsorbents is between \$0.44 and \$0.86 per pad². Pads should be changed 4-6 times a day³, meaning the annual expenditure for wearing absorbents could reach \$4,402. Because absorbents aren't generally covered by insurance, these costs are borne by the user.

The most common side effect of absorbents is
Incontinence-Associated Dermatitis (IAD) which

Variable	Cost (Low)	Cost (high)
Cost/superabsorbent pad	\$0.44	\$0.86
Pads Worn/Day	4.27	5.9
Cleaning time/episode (mins)	13.48	20.22
Cost of managing skin complaint	\$37.37	\$543.63
Episodes of skin complaint/year	2.65	3.97
Cost of laundry of linen/year	\$261.33	\$391.98
Total Cost Per Year	\$1,046.12	\$4,402.20

All figures taken from Brazzelli et al. "Absorbent Products for Containing Urinary and/or Fecal Incontinence in Adults," Journal of Wound, Ostomy and Continence Nursing, Jan. 2002: pp. 45-54.

occurs in up to 25% of users⁴. Continuous use of absorbents for as little as 5 days has been shown to cause increased sweat production and compromised skin barrier function⁵. Continuous absorbent use is also associated with an increased risk of pressure ulcers⁶.

Absorbents also have several more ineffable downsides – like the pervasive ammonia smell, the bulky heft visible under your clothes and the need to carry extra supplies whenever you leave the house.

Indwelling Catheters

Whether you're wearing them for a day or a year, indwelling catheters dramatically increase your risk of infection. Catheter associated urinary tract infections (CAUTI) account for at least 40% of all infections acquired in hospitals and costs the healthcare system more than \$2B a year⁷. Twenty-five percent of all hospital patients will be catheterized each year; yet, 38% have no medical indication – **they are put in for convenience**⁸. The risk of developing a catheter associated UTI increases by 5% for every day the catheter is in place; long term use has a 100% infection rate⁹.

Long term indwelling catheterization is also associated with a heightened risk of bladder cancer. An estimated 10% of individuals who use an indwelling catheter for 10 years or more will develop bladder cancer¹⁰.

There is a consensus among medical professionals today that permanent indwelling catheters should be avoided whenever possible. However, particularly among the spinal cord injured population, intermittent catheterization is still a major part of bladder care.

External Products

There is depressingly little diversity in the external catheter market. External devices are designed exclusively for men and attach to the male anatomy and then hook into a drainage bag. The most common is a condom catheter. This is exactly what it sounds like – a condom with a tube to a leg or bedside bag. On the upside, these are cheap and covered by Medicare and most insurance plans.

The downside is that they seal to the shaft of the penis using an aggressive acrylic adhesive similar to duct tape and has to be removed each time you need to intermittent catheterize. Condom catheters soak the penis in urine increasing the likelihood of skin breakdown and UTIs. Up to 15% of users will experience skin breakdown and 40% of long term users will get a UTI¹¹. Lastly, and perhaps most importantly, condom catheters frequently dislodge causing embarrassing accidents.

The other type of external device available is Men's Liberty, a hydrocolloid external device that seals only to the tip of the penis and directs urine into a collection chamber. It is also possible to intermittent catheterize through the device, minimizing unnecessary device changes. With over one million units used, Men's Liberty has not had any reported adverse

events, including UTIs or skin injuries¹². It is covered by Medicare, the VA and most insurance plans.

How to Choose the Right Product for You?

When it comes to managing incontinence, be sure to check out the 4 C's: Cause, Cost, Complications and Caregiving. Make sure that whatever you choose is within your budget, low on complications and increases your independence.

Once you've mastered the mechanics, set goals on how you can remain active. The typical response when dealing with urine control is to cut back on social activities. This is understandable until you learn to manage it. But that's the key – manage it; then get out and live life to the fullest.

*Additional information and references are available online at: http://blog.mensliberty.com/references

About the Author

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¹ Resnick, NM, Improving treatment of urinary incontinence (commentary letter). *Journal of the American Medical Association*. 1998;280 (23):2034-2035. Accessed online: http://www.nafc.org/media/media-kit/facts-statistics/

² Brazzelli et al. "Absorbent Products for Containing Urinary and/or Fecal Incontinence in Adults," *Journal of Wound, Ostomy and Continence Nursing*, Jan. 2002: pp. 45-54.

³ Brazzelli et al. "Absorbent Products for Containing Urinary and/or Fecal Incontinence in Adults," *Journal of Wound, Ostomy and Continence Nursing*, Jan. 2002: pp. 45-54.

⁴ Gray, M., "Optimal Management of Incontinence-Associated Dermatitis in the Elderly," *American Journal of Clinical Dermatology*, 2010:00 (0).

⁵ Aly, R., Shirley, C., Cunico, B., et al, "Effect of Prolonged occlusion on the microbial flora, pH, carbon dioxide and transepidermal water loss on human skin," *Journal Investifative Dermatology*, 1978; 71 (6): 378-81.

⁶ BioDerm estimate, 2005, based on Pajk, Marilyn <u>Pressure Sores</u>. Merck Manual of Geriatrics Section 15, Chapter 124. Internet Edition provided by Medical Services, USMEDSA, USHH. Published by Merck and Co. Inc, 2000

⁷ Kunin, Calvin, "Nosocomial Urinary Tract Infections and the Indwelling Catheter: What is New and What is True?" *Chest* 2001; 120: 10-12.

⁸ Munasinghe, Rajika L. MD. Et al. "Appropriateness of Use of Indwelling Urinary Catheters in Patients Admitted to the Medical Service". <u>Infection Control and Hospital Epidemiology</u>. October, 2001. Vol.22 No.10. 647-9. And Gokula, Radha Ramana Murthy, et al. "Inappropriate use of urinary catheters in elderly patients at a midwestern community teaching hospital". <u>American Journal of Infection Control</u>. June, 2004. 196-9; And, HCUPnet data on all hospital stays in the U.S. 2009, Online at: http://hcupnet.ahrq.gov/HCUPnet.jsp?Id=D3E4AF24057E106B&Form=SelCROSSTAB&JS=Y&Action=%3E%3ENext%3E%3E&Oneway=Yes. Last accessed: May 18, 2011.

⁹ Sanjay Saint, MD, MPH and Benjamin A. Lipsky, MD. "Preventing Catheter-Related Bacteriuria: Should We? Can We? How?" *Archives of Internal Medicine. 159 (26 April 1999): 800-808.*

¹⁰ Shokeir, A., "Squamous cell carcinoma of the bladder: pathyology, diagnosis and treatment," *British Journal of Urology International*, 2004; 93: 216-220.

Ouslander, J., Greengold, B., Chen, S.,, "External Condom Catheter Use and Urinary Tract Infections Among Incontinent Male Nursing Home Patients" *Journal of the American Geriatrics Society*, Vol. 35, 1987; And, Golji, H., "Complications of External Condom Drainage," *Paraplegia* (19), 1981.

¹² Data available upon request. Data from the Manufacturer and User Facility Device Experience (MAUDE) database and BioDerm's complaint handling system.