

Cleaning the Urinary Drainage Bag

The questions frequently asked regarding urinary drainage bags are “How long can I use one urinary drainage bag safely,” and “How do I really clean the urinary drainage bag?” The goal of keeping the urinary drainage bag clean is to prevent urinary infections. In an ideal world, one would change the urinary drainage bag out to a new bag every day. The cost of a new bag daily would be quite expensive.

Household bleach has been used with success to clean urinary drainage bags. One study used 180 cc's (180 cc's = 6 ounces) of one percent solution of bleach (one part bleach to 99 parts water) as a urinary bag soak for 30 minutes. The same bag was used for two to eight days with the daily bleach-water soak without bacterial growth.

A second study compared five types of soaks to prevent bacterial growth for urinary drainage bags. Plain tap water had no effect on bacterial growth, therefore, was not recommended. Acetic acid (0.25%) and hydrogen peroxide (3%) had only a mild effect on lowering bacterial growth. Sporicidin (1:16 solution) and bleach (0.06%) were shown to be most effective in immediate and complete killing of bacteria. Bleach was less expensive as compared to Sporicidin. These urinary bags were only used once and then the soaks were tested for effectiveness against bacterial growth.

A third study, both 2000cc (large night urinary bag size) and 500 cc (leg urinary bag size) urinary bags were rinsed twice with tap water following by soaking with 1:10 solution of 5.25% bleach (1/2 ounce Bleach and 5 ounces tap water). The bleach solution was agitated in the urinary bag for a ½ minute and then drained. The urinary bag was then allowed to air dry for 12 hours. After the first, second, third, and fourth week, the bags were rinsed with soy broth as the researchers attempted to grow bacteria from the urinary bags. Also, the persons with the urinary bags were tested for bacteria in their urine. Results of this study using bleach showed that 95.6% of leg bag cultures were considered acceptable for stopping bacterial growth. The effects of bleach rinses were effective also for weeks three and four of urinary bag use. It was noted that none of the bags leaked, 2 of 54 bags had separation of vent within the bag, and no odor was noticed over four weeks.

The fourth study compared the use of 50 cc's (50 cc's = two ounces with removing two teaspoons of solution) distilled white vinegar or 50 cc's 3% hydrogen peroxide for cleaning urinary drainage bags. The vinegar or hydrogen peroxide was placed in the urinary drainage bag and gently mixed within the bag, then drained. The study involved 20 persons who had long term, indwelling urinary catheter use. The urine cultures done at 48 hours intervals showed that there was a significant decrease of bacteria in the urinary drainage bags irrigated with vinegar. Researchers considered vinegar not highly irritating, not bad smelling, not corrosive, not staining, and just actively killing bacteria. The researchers plan to repeat this study using more people in a second study to confirm results.

Conclusions: The use of diluted bleach or distilled white vinegar has been shown to be effective as cleaning agents for urinary drainage bags. The one study did show that the urinary bag could be used for a month with consistent cleaning with bleach solution. **Note:** Use care when diluting bleach with water, as bleach can irritate the skin and remove the color in clothing. Bleach fumes can also be irritating if a person breathes them directly.

References

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