

Urinary System Case Studies

You can use your knowledge of the urinary system to solve everyday problems. Below are case studies. Use your knowledge of the urinary system, the Web sites listed and any other sources to address each of the following situations.

1. A female is embarrassed because she cannot control her urine. She voids when laughing, coughing or jumping. Identify her medical condition. Is this a serious medical condition? What type of medical treatment might she need?
<http://www.patient.co.uk/showdoc/23068767>
2. A daycare teacher is asking some advice on "potty training." She would also like information for parents of older children on bedwetting. At what age can parents expect their child to gain voluntary control of urination? Is bedwetting a behavioral control or is there a medical basis for its occurrence? How can you stop a child from bedwetting?
<http://www.nlm.nih.gov/medlineplus/toiletrainingandbedwetting.html>
http://parentcenter.babycenter.com/0_developmental-milestone-toilet-training_63952.pc
3. A man has polycystic kidney disease and knows it is genetic. He and his wife are considering having children. He wants to know the chances of having a child with the disease. Is the disease serious enough that they should consider adoption rather than having their own child?
<http://www.pkdcure.org>
<http://kidney.niddk.nih.gov/kudiseases/pubs/polycystic/>
4. You see the statistics and notice there are more women than men who get UTIs (Urinary Tract Infections). Is there a reason for this observation? Are certain people more susceptible for getting the infections? What is the common treatment for UTIs? How can you prevent them?
<http://womenshealth.about.com/cs/bladderhealth/a/UTI.htm>
5. A runner is training for the Chicago Marathon. It is a hot summer and is concerned about dehydration. Should he drink large volumes of water before he runs? Should he continue to dehydrate throughout the course? Why or why not? What might be the danger in doing this? What is the recommended water intake for runners participating in a long run?
<http://www.runnersworld.com/drinks-hydration/sipping-points>
<http://running.about.com/od/illnessesandrunning/p/dehydration.htm>

6. A woman who is 60 has a blood pressure reading of 150/100. This shows a significant rise over previous readings. Her doctor prescribed lisinopril which is an ACE inhibitor. Her health insurance does not cover prescriptions. She does research and finds that there are cost effective drugs called diuretics that people refer to as "water pills" that can control high blood pressure.
- What therapy does current research show to be most effective in treating hypertension in people over the age of 55? Is there agreement in these findings?
 - How does an increase in water loss lower blood pressure?
 - What are the benefits of using diuretic treatment for high blood pressure?
 - What are the side effects of this treatment?
 - Compare the cost of this treatment to ACE inhibitor treatment.

<http://www.pbs.org/newshour/bb/health/july-dec02/hypertension.html>

<http://www.medicinenet.com/script/main/art.asp?articlekey=51967>