New early warning system to prevent life-threatening urinary infections in catheter users

Infection alert in catheters could tackle hospital superbugs

Amsterdam (April 25, 2016) - A new infection alert system in catheters could prevent serious infections in millions of elderly people. The system uses a sensor that changes color when bacteria are detected, allowing for earlier treatment and preventing infections from becoming life-threatening.

A catheter drains urine from the bladder when a person can't release urine without help or is incontinent, including elderly people. Catheter-related urinary tract infections are a major cause of hospital-acquired infections and affect millions of people around the world. The new system could help prevent these infections, especially in elderly people who are at higher risk of developing them.

The infection alert system was developed by Dr. Toby Jenkins and his colleagues at the University of Bath. It uses a sensor that changes color when bacteria are detected, allowing for earlier treatment before the infection becomes serious. The sensor is applied to the catheter and is activated by the bacteria in the urine. When bacteria are detected, the sensor changes color, indicating that the catheter needs to be changed to prevent infection.

The researchers tested the system using a glass bladder and artificial urine, and found that it worked well. The system gives advanced warning of a catheter blockage 10 to 12 hours before it happens, allowing for earlier treatment and preventing infections from becoming serious.

The new system could be particularly useful for elderly people in care homes, who are at higher risk of developing infections. The researchers hope that the system will be adopted by hospitals and care homes to prevent infections from becoming serious and improving the health of elderly people.

The researchers are now working to develop a clinical trial to test the system in real-world settings. They hope that the system will be approved for use by health authorities and adopted by hospitals and care homes to prevent infections from becoming serious.

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