

Independence of Urinary Symptoms and Urinary Dipstick Results in Voiders with Neurogenic Bladder

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Key points:

- The study looked at how urinary symptoms and urine dipstick results are related in people with neurogenic bladder due to spinal cord injury (SCI) or multiple sclerosis (MS) who empty their bladder through voiding.
- The study found that the symptoms people with neurogenic bladder have do not always match the results of a urinary dipstick result. Relying only on the urinary dipstick results may not be a reliable measure of urinary symptoms for people with neurogenic bladder.

Plain language summary:

This research article examines whether there is a connection between urinary symptoms and the results of a urine test in people with a condition called neurogenic bladder. Neurogenic bladder happens when the nerves that control the bladder don't work properly.

The researchers wanted to know if the urinary symptoms these individuals reported were related to the results of a common urine test using an at-home urinary dipstick. A urinary dipstick analysis is a simple test where a special paper strip is dipped into a person's urine to check for different substances. It is often used to identify problems like infections or kidney problems.

To understand this, the researchers looked at a group of people who have trouble urinating due to neurogenic bladder but who are still able to void on their own. These individuals had to meet certain criteria to participate in the study. The criteria were:

1. Having a spinal cord injury (SCI) or multiple sclerosis (MS).
2. Having experienced at least three urinary tract infections (UTIs) since having SCI or MS.
3. Emptying their bladder by voiding (not using a bladder catheter).
4. At least 18 years old.
5. Living in the United States.

The study found that the self-reported weekly symptoms didn't always match up with the results of the urine test. This means that having certain symptoms doesn't always mean the urine test will

show abnormal results. The researchers concluded that relying only on the urine test results might not give the full picture of bladder and infection problems in people with neurogenic bladder.

In summary, this study highlights that when urinary symptoms occur, this simple at-home urine test may not show signs potentially indicating infection among people with neurogenic bladder. This does not mean that urine dipsticks are not helpful for these individuals. It means that urine dipsticks don't provide information to help make decisions about urinary symptoms in people with bladder problems caused by spinal cord injury (SCI) or multiple sclerosis (MS) who empty (void) their bladder regularly.

Keywords and acronyms:

- **Multiple Sclerosis:** a disease that affects the brain and spinal cord.
- **Neurogenic bladder:** A condition where the nerves that control the bladder are damaged or not working well. This can cause problems with controlling when and how much you urinate.
- **Spinal Cord Injury:** is damage to cells and nerves that send and receive signal from the brain and the body.
- **Urinary tract infection (UTI):** is an infection in any part of the urinary system including the kidneys, bladder, ureters, and urethra.

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