

PAEDIATRIC SPINA BIFIDA PATIENTS AND PRE-LUBRICATED INTERMITTENT CATHETER USE

Aims of Study

Spina bifida is a name given to a group of birth defects that compromise the development of the central nervous system, i.e., the brain, spinal cord, and nerve tissue. While a person with spina bifida may be born with a functional urinary system, over time many of the complications of spina bifida lead to a condition known as a neurogenic bladder: generally the result of damage to the nerves in the sacral area [1, 2]. Urinary incontinence usually affects those children with the most severe form of spina bifida. Several methods for managing urinary incontinence exist depending on the severity of the problem, such as the wearing of adaptive clothing, clean intermittent self-catheterisation, and surgery. Clean intermittent self-catheterisation (CISC) is a technique involving the insertion of a catheter through the urethra and into the bladder several times a day for the purpose of emptying the bladder. Self-catheterisation, as a method of providing continence, is readily accepted by children, and easily taught. This study documents the experience of a group of children (currently hydrophilic catheter users) that have been introduced to a self-lubricating (pre-lubricated) catheter.

Methods

Thirty-four spina bifida paediatric patients, in the U.K., who are currently undergoing CISC with a hydrophilic catheter, were evaluated to assess the effectiveness and satisfaction with a pre-lubricated catheter. The patients range in age from 6 years to 15 years of age, and have been undergoing clean intermittent self-catheterisation for no less than two months (maximum 132 months). Forty-seven percent of the children are in wheel chairs. The children were asked to use the pre-lubricated catheters for a period of 5 catheterisations and then were surveyed as to their satisfaction with the catheter compared with their experience with their current hydrophilic style catheter.

Results

Seventy-nine percent of the children stated that using an intermittent catheter that did not require the use of water for activation of the lubricating surface was of benefit to them. Accordingly, seventy-six percent also stated the pre-lubricated catheter was easier to prepare. When asked about the feel and comfort of the procedure, sixty-six percent of the children stated that it was more comfortable than their hydrophilic catheter procedure. Seventy-three percent of the children stated it was more effective in bladder drainage, while seventy-four percent thought the pre-lubricated catheter was more convenient than their hydrophilic catheter.

Conclusions

The results of this study suggest that health care providers introduce children with spina bifida to the option of pre-lubricated intermittent catheters. The use of a pre-lubricated catheter appears beneficial in providing an overall positive life experience to children with this condition. In this group of children it was not only a matter of convenience, but also a matter of comfort and effectiveness in its intended purpose.

References

1. Urologic Nursing, Principles and Practice, K.A. Karlowicz, Editor, W.B. Saunders Co., Philadelphia, 1995.
2. Wein, A.J., and D.M. Barret, Voiding, Function and Dysfunction, A Logical and Practical Approach, Year Book Medical Publishers, Inc., Chicago, 1988.