No-touch catheter/technique

Introduction of a no-touch catheter/technique for intermittent catheterization seems to be well accepted both by caregivers and patients and it is not necessarily associated with higher costs. On the contrary, it could potentially reduce costs, saving time and errors in the healthcare system and reduce infection complications in general. The clinical evidence level is low for using no-touch technique/catheter to reduce UTIs but current available studies suggest benefits of it.

Intermittent catheterization could be practiced using sterile technique (sterile material and handling), aseptic technique (sterile catheter, use of gloves and cleansing of genitals), no-touch technique (aseptic technique with a no-touch catheter) or a clean technique (sterile single-use or cleaned reusable catheter without gloves).¹

The no-touch technique includes use of a catheter constructed for introduction without touch by the user’s hands. Different catheter types are described in the literature using a non-touch sleeve,²-⁶ insertion tip,² ⁵-⁶ closed system¹⁰ and/or protective grip. A no-touch technique was first introduced by O’Neil et al. in 1982 who evaluated a catheter with sealed introducer in female patients admitted for laparoscopy and found it to reduce the risk for catheter-induced bacteriuria by bypassing the distal urethra.⁵ The no-touch concept has later been verified in pre-clinical² ⁵ and clinical studies.³⁻⁴⁻⁶⁻⁸⁻¹⁰

Pre-clinical studies have concluded that a no-touch catheter could contribute to fewer sterility errors when catheterization is performed by healthcare personnel on models² and less bacteria contamination when tested in vitro in the laboratory.⁴⁻⁷ Both aspects could potentially reduce the risk of developing UTI but need to be verified in clinical settings.

Clinical studies propose that use of a no-touch catheter is associated with a 30% UTI reduction and general low UTI rates of 0.68% in a spinal cord injured population.⁵⁻⁶ Hospitals have also been reported to implement a no-touch catheter and technique after concluding it to be the preferred choice for personnel and by showing 35% less infections per admission when compared to a retrospective control group.⁵ Preference of both caregiver and patient has been further investigated and two studies have shown that management of a no-touch catheter is easier and that is save time in the hospital setting.¹⁻⁸ Other studies have documented positive patient responses related to introduction of a no-touch catheter due to perceived ease of use, reliability and comfort.¹⁻¹⁰ For instance Denys et al. 2012 concluded that more than one third of the patients studied wanted to continue using a no-touch catheter and more than half would recommend it to other patients.³

Introduction of a no-touch catheter would not necessarily introduce more costs as proposed by Goessaert et al. 2013 who concluded that the average cost for the no-touch method was €3.19 for women and €3.22 for male while the cost for the classic method was €2.99 for women and €4.07 for male (up to €19.41) when taking into account costs for catheter, lubricants, gloves, sets and nurse time spent.²

Published literature proposes benefits of using and implementing a no-touch catheter/technique. However, it should be noted that all available studies are compromised by design issues lowering the level of evidence.
References


