

Highlights on revised guidelines on prevention of CAUTI

Chan Sau Kuen Becky
Nurse Consultant (Continence)
Kowloon East Cluster
Hospital Authority

Background

- CAUTIs-up to 30-40%of healthcare associated infection
- Centre for Health Protection had developed 1st Edition “Recommendation on prevention of Catheter –associated Urinary Tract Infection” in 2010
- 2nd Edition on 2017

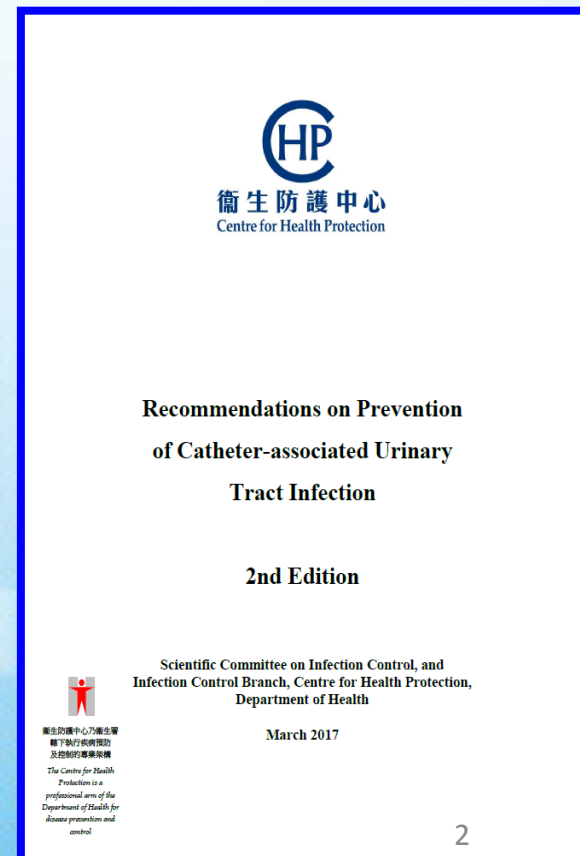


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The Effective Way to Prevent CAUTI

- “Minimize the use of urinary catheter”
- Shorten the duration of urinary catheter



Focus Area

Proper technique
for urinary catheter
insertion


Meatal care

Aseptic urine
specimen collection


Education, Training
and competence
assessment



Proper Technique for Catheter Insertion



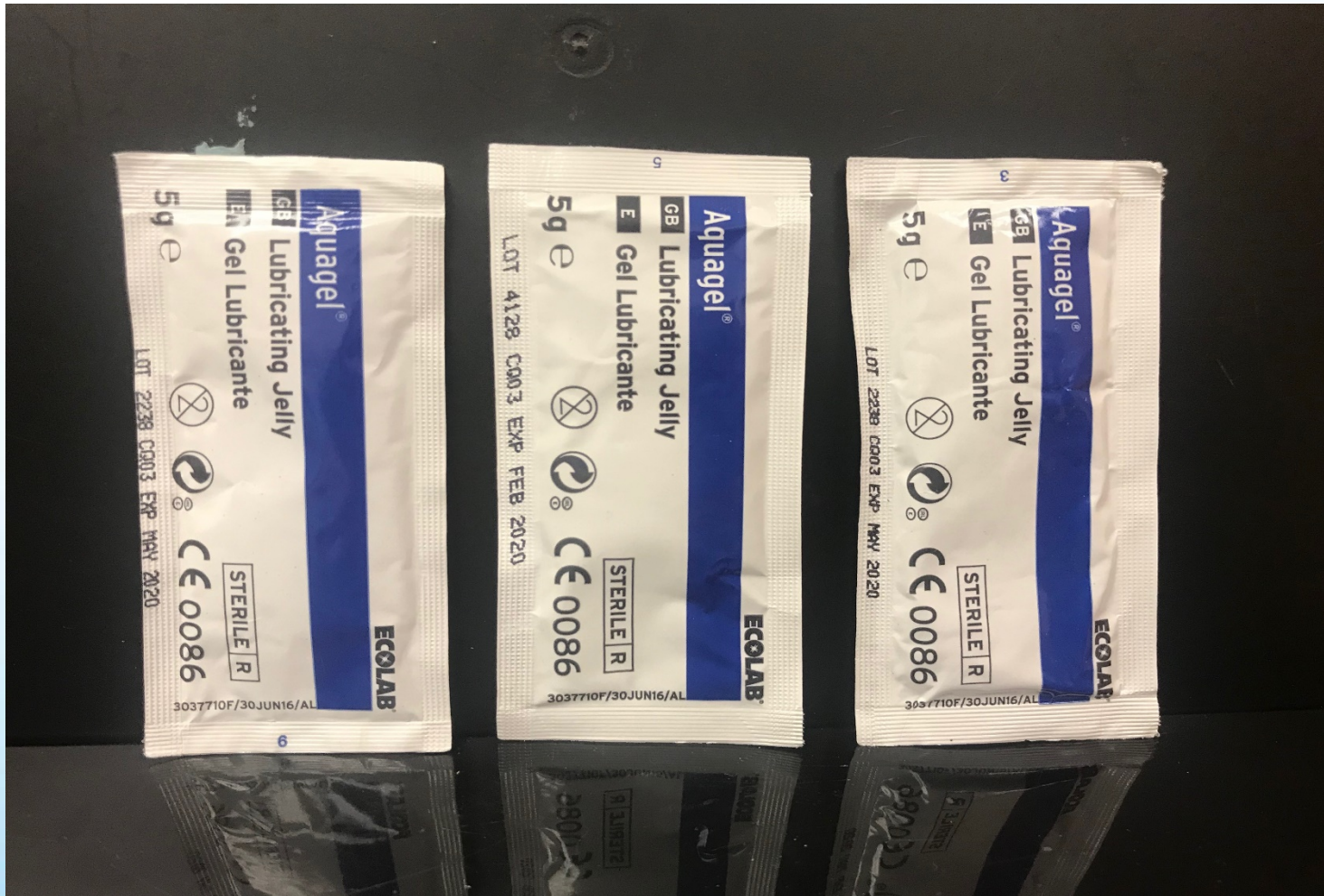
Use adequate
single –use
packet of sterile
lubricant jelly



Use antiseptic
solution to clean the
periurethral skin
before insertion

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Adequate lubricant



Effectiveness of Periurethral Cleaning Solution

Authors /year	Population	intervention	Results	Conclusions
Webster et al.,2001	436	Chlorhexidine gluconate 0.1% Vs water	The incidence of UTI were similar	The no. of UTI does not vary depending on the solute used
Ibrahim & Rashid 2002	167	Saline Vs Povidone iodine	No statistically significant difference in the incidence of UTI	No increase of effectiveness in reducing UTI
Cheung et al.,2008	20	Chlorhexidine gluconate 0.05% Vs Sterile water	No statistically significant difference in the incidence of UTI	The sterile water does not increase the rate of infection
Nasiriani et al.,2009	60	Sterile water vs Povidone iodine	No statistically significant difference in the incidence of UTI	No increase of effectiveness in reducing UTI
Fernandes 2009	60	Saline Vs Povidone iodine	Povidine iodine is more effective in prevention of UTI	There is an increased efficacy in reducing UTI when antiseptics are used

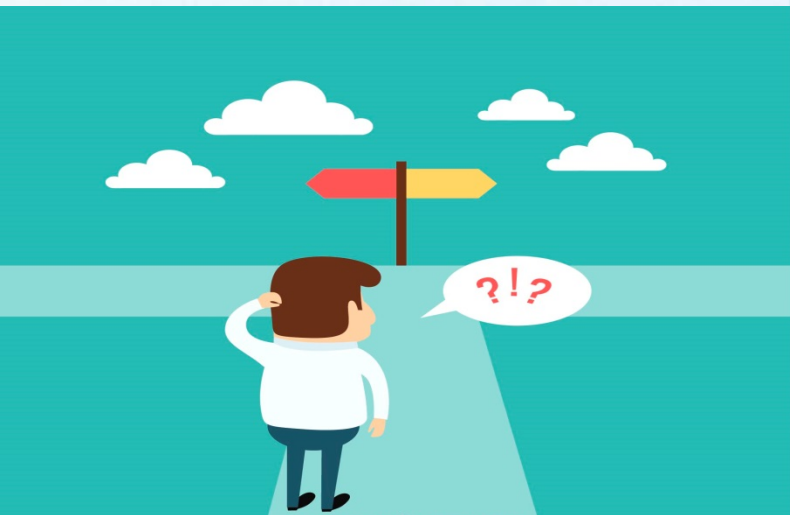
Unresolved issue

Further research needed on the use of antiseptic solution vs sterile water for periurethral cleaning before catheter insertion

(HICPAC 2009;NICE 2012 ;CDC 2017)

“Use appropriate antiseptic solution to clean the peri-urethral skin thoroughly before insertion”

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Urethral Erosion

- Can occur at either the bladder neck or the urethral meatus in both males and females

“Ensure the catheter is always firmly secure to prevent in-and out movement and urethral traction to decrease catheter dislodgement and meatal erosion.”

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Where for Secure?

- Thigh
- Abdominal skin

(EAUN 2012 ;Health Improvement Scotland 2014 ;Yarde2015)

The Benefits of Fixation Devices

Prevent excessive traction on a catheter

Prevent pain ,swelling & bleeding

Reduce internal trauma

Reduce external trauma

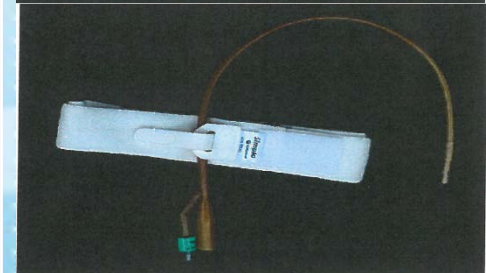
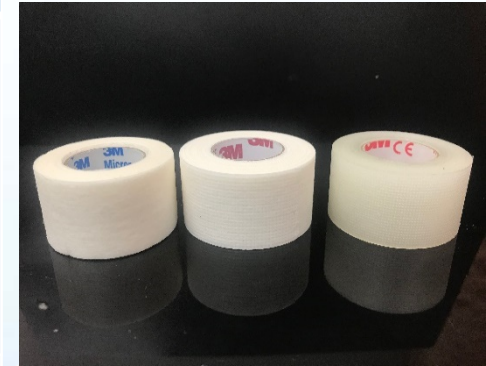
Minimise the need for repeated catheterization episode

Reduce anxiety levels & improve QOL

Decrease CAUTI

Type of Fixation Devices

Type	
Adhesive tape	<ul style="list-style-type: none">• Loosen easily• Skin damage• Sticky residue• ↑risk of infection
Adhesive or hydrocolloid paste	<ul style="list-style-type: none">• Water resistant• Last for up to 7 days• Tear or damage fragile skin
Strap	<ul style="list-style-type: none">• Different size• Venous compression & oedema if applied too tightly



Choosing the Right Device

**No one device for
all patients**

Assessment :

- For short or long term use
- The patient mobility
- Bedbound or chairbound
- Skin condition
- Carer at home
- Design for purpose of securing a catheter
- Easy to apply
- Easy to maintain & remove
- Able to secure the catheter without placing tension



Good Meatal Care

“Routine **daily** cleansing with soap and water is adequate to maintain good hygiene of the meatal area . Use of antiseptic solution is unnecessary.”

“Additional cleansing is indicated for patients with diarrhea or incontinence.”

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Cleanser



Aseptic Urine Specimen Collection

To collect a small volume of urine for culture :

“Disinfect the sampling port or distal end of the urinary catheter with appropriate disinfectant (70% alcohol)and allow time (>30 seconds)for the disinfectant to dry /work before puncture .

Never puncture silicone urinary catheters with a needle as it cannot reseal over the puncture holes.”

“Collecting the urine sample from the drainage bag is unsuitable for culture purpose “

Maintain a Sterile and Closed Urinary Drainage System

“Minimize opening and manipulating the catheter and drainage system.”

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Education ,Training and Competence Assessment

“Provide clear instruction to patients and caregivers on proper care of the urinary catheter and drainage system .”

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Hong Kong Bundle to Prevent CAUTI

- The indication for urinary catheter needs to be reviewed daily
- Nurse to remind physician stop catheter when no long indicated
- Implement auto-stop reminder when ever applicable
- Observe hand hygiene before and after urinary catheter care and use aseptic technique for insertion of catheter
- Consider using bedside ultrasound to screen for post – voiding residual urine volume before insertion of catheter in selected groups of patients

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Summary

- The recommendation provides the principles for best practice of urinary catheter care to health care professionals
- Physician , nurse and patient engagement are critical components to the success



Thank You