THE UNIVERSITY OF TEXAS AT EL PASO
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Silver alloy-coated urinary catheters: Preventing urinary tract infection

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Introduction

Urinary tract infection (UTI) is among the most frequent healthcare-associated infections globally. It is associated with increased mortality, prolonged hospitalization, and increased healthcare costs..

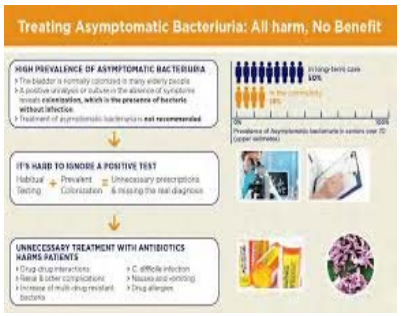
Setting and Subjects:
A long-term care facility for elderly patients ages 55 to 99 years of age with frequent urinary tract infections due to chronic catheter use.

Aim:
To determine the effect of silver alloy-coated urinary catheters in preventing urinary tract infection compared with standard silicone or latex urinary catheters in patients with chronic use.

Method

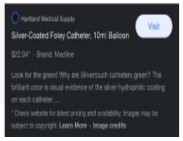
This quality improvement project used the Kurt Lewin's change model with the PDSA method.. The intervention involved the replacement of current standard urinary catheters with silver-alloy coated urinary catheters for 5 weeks in a long-term care facility

Clinical Issue



Silver alloy-coated urinary catheters Implications

The use of a silver alloy coated urinary catheter potentially reduces the incidence of CAUTI. This will lead to less morbidity and medical costs associated with CAUTI. This quality improvement project was relatively short, 5 weeks, and only done with five patients in a small facility.



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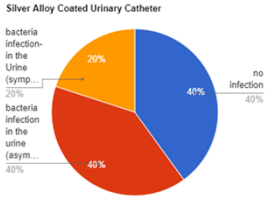
Findings



Type Of Bacteria

#	No Infection	Bacteria Infection in the Urine (Asymptomatic)	Bacteria Infection in the Urine (Sympotomatic w/ UTI)
1	Negative Urinalysis		
2	Negative Urinalysis		
3		Klebsiela Pneumonia	
4	-	E. Coli, ESBL, Pseudomonas Aeriginosa	
5	-		Enterococcus Fecalis, Candida Albicans

Result: A total of seven patients met criteria and were initially seen in the QI project. Two dropped out due to worsening health-related issues. 40% had negative urinalysis, another 40% were asymptomatic, and 20% had symptoms with multidrug-resistance organisms and candida Albicans,

Implications and Limitation

RELEVANCE

- Effectiveness of Silver alloy-coated urinary catheter
- Less mortality and morbidity
- Less medical costs associated with CAUTI.

LIMITATION

- Cost
- Patient size
- Duration

Conclusion

- Using a silver alloy-coated urinary catheter reduced symptomatic catheter-associated urinary tract infection (CAUTI) occurrences as defined by clinical criteria.

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