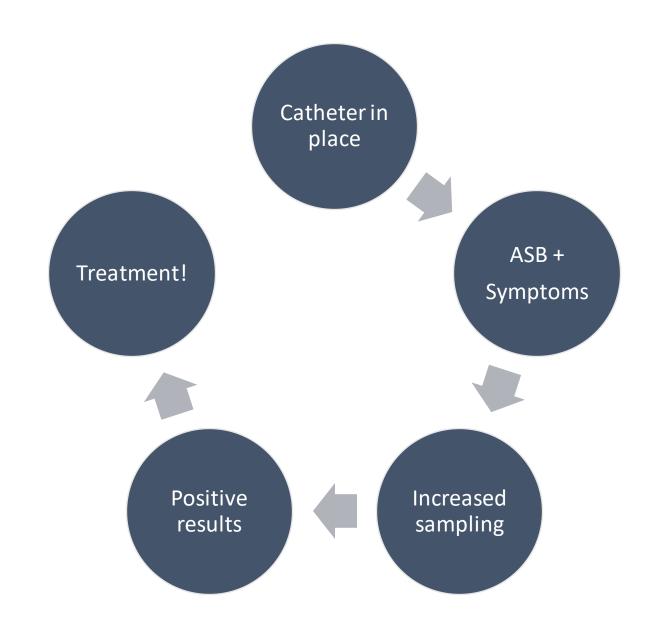


CENTER FOR STEWARDSHIP IN MEDICINE

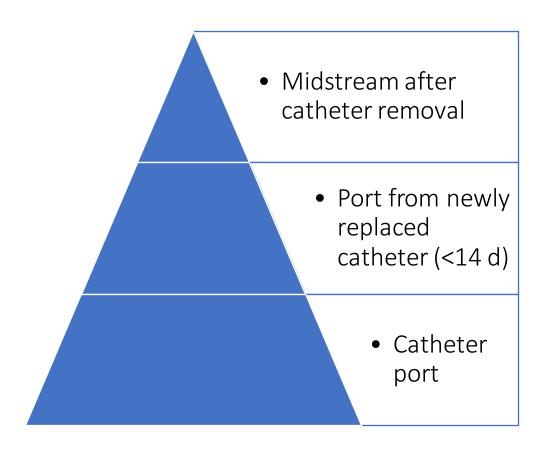
Jan 25, 2024

ASB In Challenging Populations: Catheter Associated ASB

Chloe Bryson-Cahn



SAMPLING – a bit controversial





Definitions

- CA-UTI fever, rigors, suprapubic pain, flank pain, pelvic pain, or sepsis without other cause, cath <48h.
- CA-ASB bacteria in urine culture without above symptoms
- S/sx in pt with SCI: malaise, lethargy, unease, incontinence, spasm, autonomic dysreflexia
- Symptom (pain, urgency, dysuria, fever) prevalence is similar in catheterized patients with and without bacteriuria



Prevalence of CA-ASB

Population	Prevalence
Persons with Spinal Cord Injury	
Intermittent catheter use	23-69
Sphincterotomy/condom catheter	57
Persons with indwelling catheter	
Short-term	3%-5%/catheter day
Long-term	100



Does Treatment of CA-ASB Help?

- 444 CA-bacteriuria episodes
 - 42% CA-UTI, 58% CA-ASB
- 3 related bacteremias were found
 - 2 CA-UTI, 1 CA-ASB
- 50% of pts with CA-ASB got abx for this
- Abx for bacteriuria did NOT change risk of bacteremia (from any source) or mortality

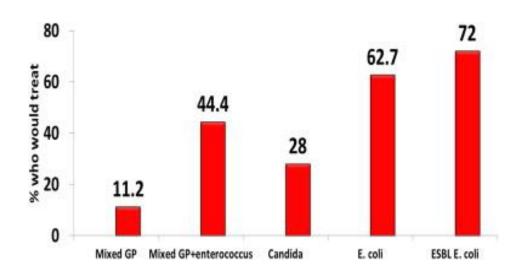
Knowledge of CA-ASB Management

Table 2. Partici	pant characteristics	s and knowledge	e score (n= 169)

Characteristic	Respondents, n (%)	Knowledge score, mean (SD)	P value*
All (n= 169)		57.5 (18.8)	.002
Staff	15 (9)	71.4 (22.2)	
Residents	154 (91)	56.1 (18.0)	
Level of training $(n=168)^{\dagger}$			< .0001
Postgraduate year 1	76 (45)	50.1 (17.9)	
Postgraduate year 2	47 (28)	61.0 (16.1)	
Postgraduate year 3-4	29 (18)	63.5 (16.5)	
Postgraduate year 5+	16 (9)	71.3 (21.5)	
Type of training (n= 154)			< .0001
Medicine	116 (75)	59.4 (17.8)	
Non-medicine	38 (25)	46.1 (14.5)	

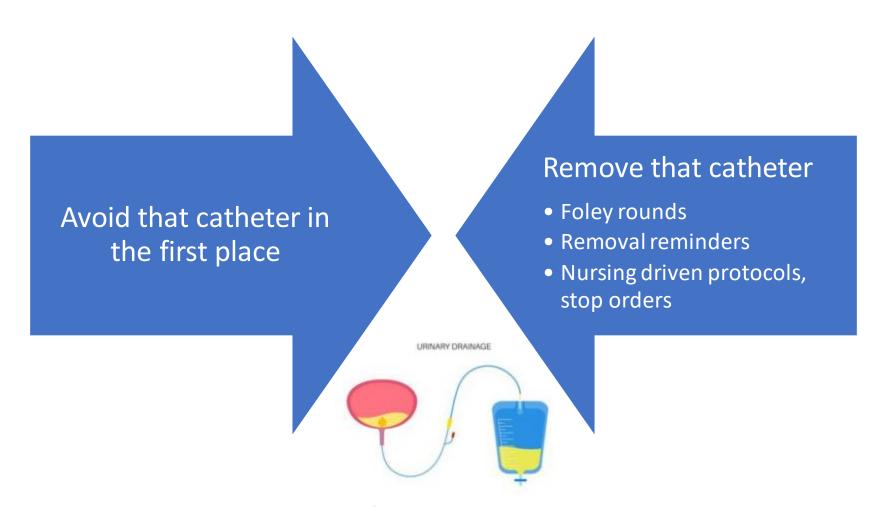
Cognitive Biases in CA-ASB

- Pyuria, organism, older age increase treatment
- Catheterized pt with pyuria
 - 26% said they would treat BUT
 - 58% treated given that clinical scenario
- Organism type:



Trautner BW, AJ Infection Control, 2014. https://doi.org/10.1016/j.ajic.2014.02.003

What Works No catheter, no CA-ASB



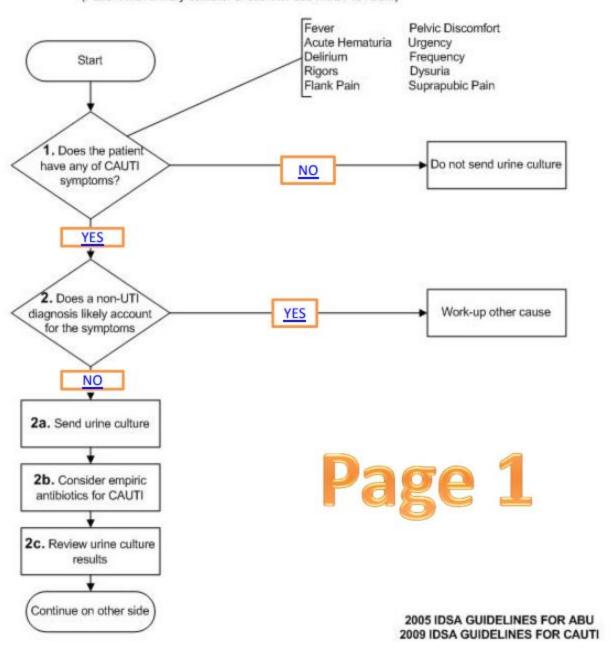
What Works Urine culture stewardship

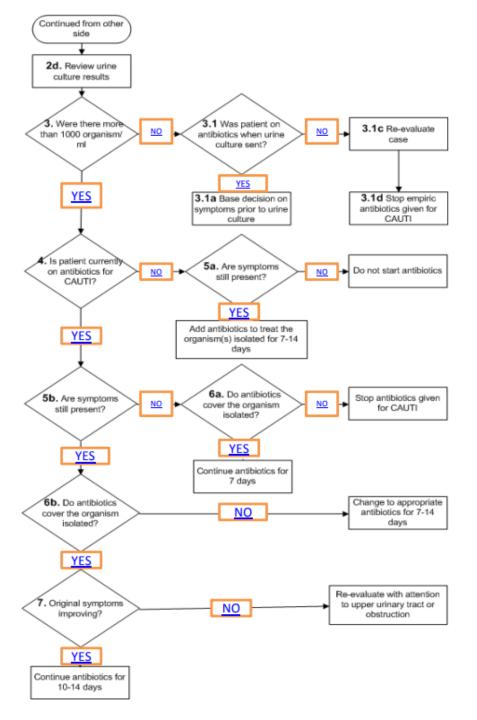
- The Kicking CAUTI: The No Knee-Jerk Antibiotics Campaign (VA acute care and LTC)
 - Education: case-based audit with feedback
 - "Actionable algorithm"



Catheter-Associated UTI (CAUTI) vs Asymptomatic Bacteriuria

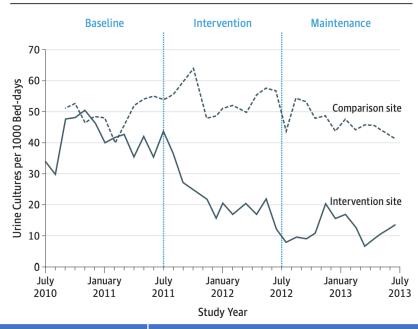
(Patient with urinary catheter or catheter use within 48 hours)





What Works Urine culture stewardship

Figure. Monthly Rates of Urine Culture Orders per 1000 Bed-days



	INTERVENTION SITE			COMPARISON SITE		
	Baseline	Intervention	Maintenance	Baseline	Intervention	Maintenance
ASB Treated per 1000 bed-days	1.6	0.6	0.4	0.6	0.6	0.5
CAUTI, not treated per 1000 bed- days	0.2	0.1	0.1	0.1	0.2	0.1

Trautner BW, JAMA Int Med, 2015. doi:10.1001/jamainternmed.2015.1878

Other Low Hanging Fruit

- Duration of therapy
 - If no fever or s/sx of upper tract disease, some data support treating like cystitis
- Types of antibiotics (FQ avoidance)
- Specific organisms (not treating Candida, Coag neg Staph, some Strep, Lactobacillus)
- Catheter placement or admission cultures (not symptom driven)

