Antimicrobial Stewardship November, 2024

Recurrent UTI

Recurrent UTI is defined as two or more infection in the previous six months or three or more during the previous year. Recurrent UTIs are very common, even among healthy women with normal urinary tracts. There are, however, certain factors which are associated with recurrent UTIs:

- CKD, DM, renal transplant, immunosuppression, catheterization, neurogenic bladder, anatomic abnormalities, spermicide use, new sex partner, urinary incontinence

Non-pharmacological interventions include liberal fluid intake, avoiding spermicides, postcoital voiding (no evidence to support his, but not harmful), topical estrogen for postmenopausal women.

With regards to medications, there is the antibiotic sparing and non-sparing approaches. One generally starts with the sparing approach: methenamine and/or cranberry products. Methenamine is dosed at 1gm BID. Durations of up to 12 months have been studied. Methenamine and antibiotic prophylaxis are similarly effective, but antibiotics more so (less than one additional UTI a year with methenamine vs antibiotic).

The optimal dose and formulation of cranberry products are unknown and may be more effective for women with urologic abnormalities. There is no evidence for D-mannose or probiotics.

Antibiotic prophylaxis can be divided into two approaches: continuous and post-coital.

Continuous	Postcoital
• Macrobid 50mg or 100mg daily • TMP-SMX 40mg/200mg once daily or three times a week • TMP 100mg daily • Cephalexin 125mg or 250mg daily • Cefaclor 250mg daily • Fosfomycin 3gm every 7 to 10 days	• Macrobid 50mg or 100mg once • TMP-SMX 40mg/200mg once or 80mg/400mg once • TMP 100mg once • Cephalexin 250mg once

Antibiotic prophylaxis is effective but associated with resistance. Unfortunately, the amount of resistance is unknown. There is no evidence supporting one regimen over another. Choice should be guided by previous cultures, allergies, and drug interactions. Downsides to prophylaxis include toxicity, resistance, C. diff, and alteration of the gut microbiome.

All antibiotics can also cause vaginal and oral candidiasis as well as GI upset. Resistance may be higher with TMP-SMX. All antibiotics are also associated with alterations in gut microbiome and C. diff.

All AntiMicroStew issues, articles, etc available at: https://drive.google.com/drive/folders/1COUOQIj1ibKQYTG2F1tj-LMT2zEK0Ebi