Top Ten Ways for Emergency Physicians to Avoid Prescribing Unnecessary Antibiotics

1. Beware UTI myths.

40% of antibiotics given in hospital settings are avoidable. Odor, bacteriuria, nitrates, leukocyte esterase, and pyuria cannot diagnose UTI without clinical signs/symptoms.

2. Use the modified Centor Score for pharyngitis.

One point is assigned for each of the following criteria: fever, absence of cough, tonsillar exudates, and swollen/tender anterior cervical nodes. Current guidelines recommend no rapid testing and withholding antibiotics in patients with scores of zero and one, and treating only positive rapid test results for scores of two or greater.

3. Treat sinusitis as viral unless strict criteria are met.

Sinusitis symptoms must be present for ≥10 days without any evidence of clinical improvement *OR* patient has *severe* symptoms or signs of high fever (≥39°C [102°F]) and purulent nasal discharge or facial pain lasting for at least 3–4 consecutive days *OR* worsening symptoms or signs characterized by the new onset of fever, headache, or increase in nasal discharge following a typical viral upper respiratory infection. If criteria are met, first-line therapy should be a 10-day course of amoxicillin.

4. Avoid screening for asymptomatic bacteriuria.

Asymptomatic bacteriuria is common, It is present in up to 5% healthy premenopausal women, 22% community dwelling elder women, 50% and 35% of institutionalized women and men respectively. Urinalysis for infection should only be sent in patients with urinary symptoms.

5. Think twice about "UTIs" in patients with altered mental status.

Implement wait and see approach to non-specific symptoms of weakness, falls, fatigue, and/or delirium in elders, long term care residents, and patients with cognitive impairment before starting antibiotic for UTI

6. Consider not prescribing antibiotics for uncomplicated abscesses.

Several studies conducted in the ED provide data to support withholding antibiotics after incision and drainage of uncomplicated abscesses, even in cases of suspected methicillin-resistant Staphylococcus aureus. One large RCT supports TMP/SMX use in abscesses.

7. Avoid double coverage for community-acquired cellulitis.

TMP/SMX retains nearly 100% effectiveness vs. CA-MRSA. Wisconsin clindamycin resistance rates approaching 30%. No need to double cover uncomplicated cellulitis, single agent cephalexin is sufficient.

8. Consider watch and wait prescriptions with acute otitis media.

Most otitis media is viral. Delaying treatment is usually associated with resolution of clinical signs and symptoms. Only 40% of watch and wait prescriptions are filled.

9. Use procalcitonin to help guide decision to antibiose in COPD.

The FDA approved procalcitonin in 2017 to guide antibiotic initiation in LRTI.

10. Avoid antibiotics for routine dentalgia

Reversible pulpitis, periodontitis, and mechanical endodontic conditions present as tooth pain, but do not require antibiotics. NSAIDs and nerve blocks are recommended therapy. Antibiotics are appropriate if there is an adjacent space infection, trismus or odynophagia.

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