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# Coastal ASPIRES Antimicrobial Stewardship

Antimicrobial Stewardship is...RIGHT diagnosis, RIGHT drug, RIGHT dose, RIGHT route, RIGHT interval, RIGHT duration!

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3 clinical pearls to help preserve vancomycin IV

# PROSPECTIVE ANTIMICORBIAL THERAPY REVIEW:

Lions Gate Hospital ✓ Squamish General Hospital ✓ Powell River General Hospital ✓ Sechelt Hosiptal - launching June 2019

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# 3 clinical pearls to help preserve vancomycin IV

### **Empiric Bacterial Meningitis Treatment**

Non-local guidelines recommend adding vancomycin IV to ceftriaxone IV to cover ceftriaxoneresistant Strep pneumoniae (not MRSA!) So What

S. pneumoniae susceptibility to **ceftriaxone** is 100% in VCH<sup>2</sup>.

### **Now What**

For locally acquired or non-travel associated meningitis:

- Patient 18-50 y/o and immunocompetent: ceftriaxone IV
- pregnancy, >50yo, immunocompromised: ampicillin IV + ceftriaxone IV
- Patient with recent neurosurgery: meropenem IV + vancomycin IV + involve ID
- +/- acyclovir IV for viral meningitis coverage

# (Strep pneumoniae) 1

# Cellulitis Treatment in patients with MRSA colonization

# 0 (Staph aureus) 1

- Patients colonized with MRSA can still have cellulitis due to streptococci.
- MRSA cellulitis more likely to present with purulence.

Do not initiate empiric anti-MRSA coverage based on MRSA colonization status.

### **Now What**

When anti-MRSA coverage indicated, consider PO options such as doxycycline PO (susceptibility 97%<sup>2</sup>) or TMP-SMX PO (susceptibility 93%<sup>2</sup>)

# **Hospital Acquired Pneumonia Treatment**

MRSA is not a common pathogen for pneumonia.



(MRSA) 1

### So What

- MRSA nasal screen within 1 week has excellent negative predictive value (>95%) for ruling out MRSA CAP/HCAP/HAP. MRSA nasal screening collected after initiation of anti-MRSA therapy may still be reliable as respiratory tract eradication takes a few days. 3,4
- Above not applicable to VAP patients, ICU patients, or patients with structural lung diseases (cystic fibrosis, bronchiectasis)

### **Now What**

Do-not-start/Stop vancomycin IV if MRSA nasal screen negative within 1 week

References: 1. https://www.giantmicrobes.com 2. VCH Coastal CoC Antibiogram 2017 3. Ann Pharmacother. 2019 Jun;53(6):627-638. 4. Clin Infect Dis. 2018 Jun 18;67(1):1-7

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**Antimicrobial Stewardship Programme:** Innovation, Research, Education, and Safety Quality and Patient Safety, Vancouver Coastal Health