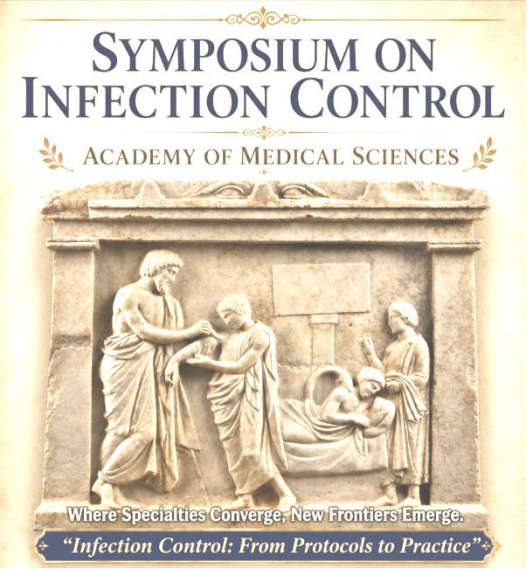
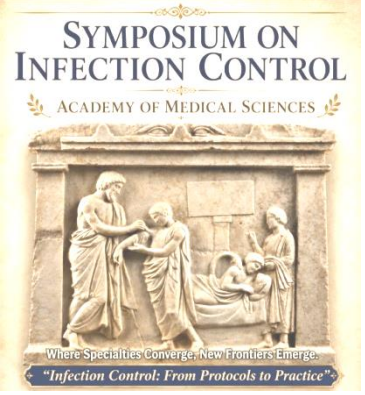


Interesting Cases in Infection Control

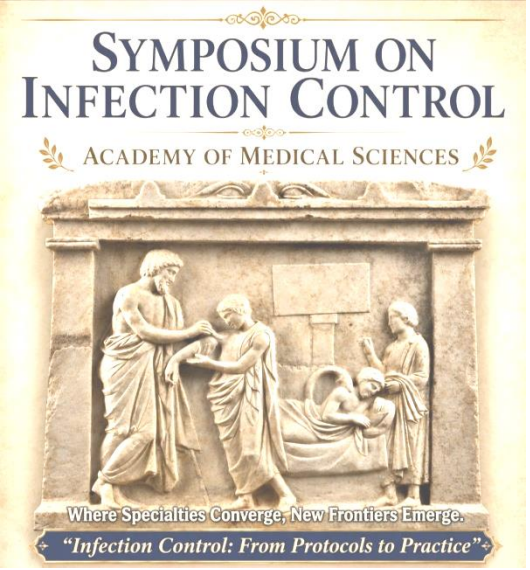
Dr. Nitin Shinde

Infectious Diseases Specialist



Take Home Message

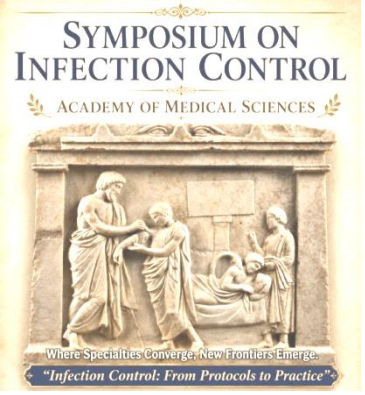
- NTM are environmental, ubiquitous, AFB
- SSTI's By NTM are rising in incidence
- Contaminated Water is common source for this infections
- Use of non-sterile tap water in surgical & cosmetic procedures – frequent source of nosocomial outbreak
- NTM SSTI's- variable clinical presentation- Delay in diagnosis
- High index of suspicion for diagnosis
- Diagnosis by tissue culture –most sensitive
- Treatment – Macrolides ,FQ , Aminoglycosides



Plasmomycin

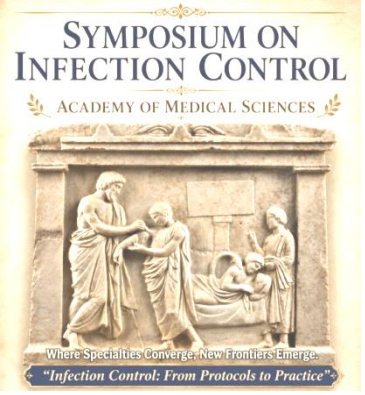
Dr. Ashwini Tayde

Infectious Diseases Specialist



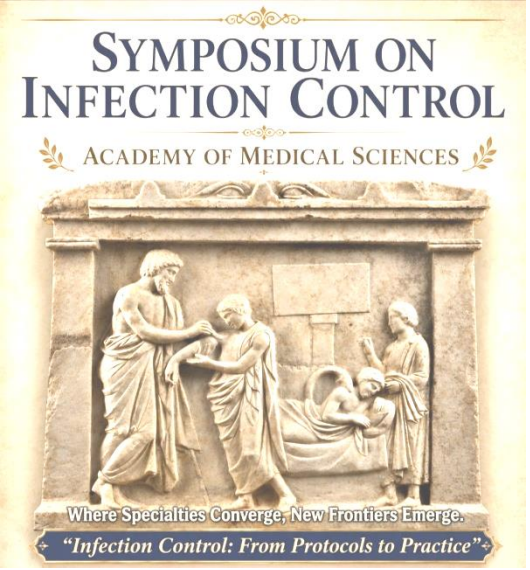
Take Home Message

- Plazomicin will be a *new option for treatment of cUTI and AP, catering to unmet need* which can be of significant relevance to Indian AMR scenario
- Activity against **resistant pathogens** (**PBP3 inserts, AME producers, ESBL, CRE, Colistin resistant Enterobacteriaceae**)
- Better activity against **CRE & Colistin resistant Enterobacteriaceae** than other AGs
- Proven efficacy in phase III trial - **Noninferior to meropenem**
- Acceptable **tolerability profile** (Less nephrotoxicity than colistin)
- Synergy with meropenem, fosfomycin and colistin in CRE isolates
- WHO has categorized it as **Reserve Antibiotic**
- Useful **targeted therapy for cUTI** and acute pyelonephritis caused by resistant pathogens



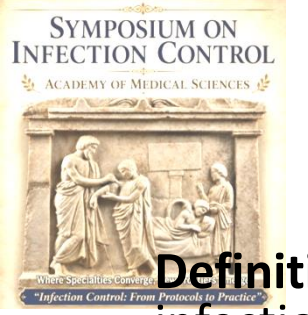
Take Home Message

- ✓ Plazomicin – Positioning in Indian AMR Scenario
- ✓ **First line therapy for CR cUTI**
- ✓ Carbapenem resistant ***E. coli*** **often associated with PBP3 inserts**
- ✓ Alternative to patients **not responding to ceftazidime avibactam+aztreonam**/Fosfomycin
- ✓ **Colistin sparing**
- ✓ In MDR **Recurrent UTI**
- ✓ **As Combination Therapy**



Infection Prevention & Control
Orthopaedic Perspective

Dr. Alankar ramteke
Consultant Orthopedic
Arthritis & Joint Replacement Clinic
Nagpur

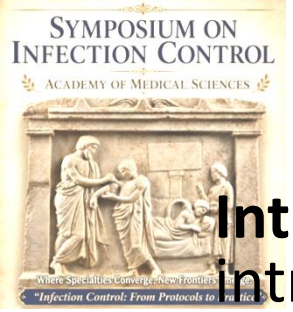


Take Home Message

Definition and Types of SSI: Surgical Site Infections (SSI) are defined as infections occurring up to 1 month (no implant) or 3 months (with implant, sometimes up to 1 year) post-surgery. Orthopedic SSIs are further differentiated into superficial vs. deep, and early, delayed, or late infections, with specific timeframes for each.

Management of Superficial and Deep Infections: Superficial infections, if culture-positive, are managed with rest, immobilization, daily wound checks, regular ESR/CRP monitoring, and compression bandages, often requiring hospital admission. Deep infections, particularly Periprosthetic Joint Infections (PJI), are categorized by onset (early, delayed, late, acute hematogenous) and often require Debridement, Antibiotics, and Implant Retention (DAIR) or two-stage revisions, with significant associated morbidity, mortality, and cost.

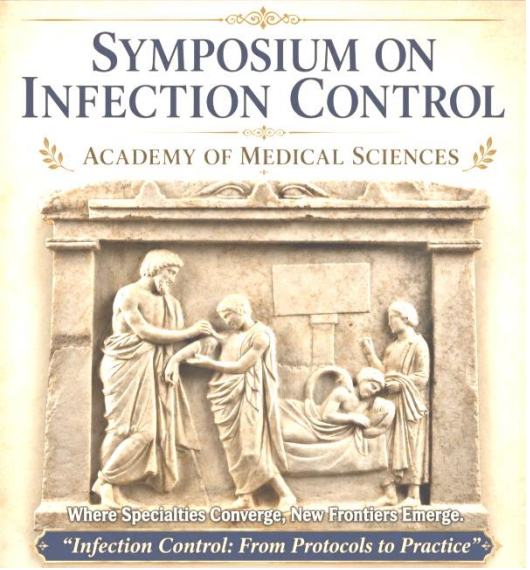
Comprehensive Prevention Strategies (Preconditioning): Prevention is emphasized as crucial, involving medical preconditioning (e.g., HbA1C control, MRSA awareness, addressing obesity, treating existing infections), lifestyle modifications (stopping smoking/alcohol), nutritional optimization (protein, albumin, Vit D), and managing medications (blood thinners, DMARDS).



Take Home Message

Intraoperative Infection Control Protocol: Strict intraoperative protocols include CHG showers, meticulous preparation (first case of the day, prior arrangement, hair clipping in OT), limited personnel and door openings, strict sterile technique (full head caps, impervious drapes, double/puncture-proof gloves with frequent changes), no finger retraction, pulsatile lavage, and meticulous skin closure.

Postoperative Infection Control and Monitoring: Postoperative measures include early removal of Foleys, IV/epidural lines, and drains (no drains used for 4 years), avoiding blood transfusions (by building pre-op Hb), using Tranexamic acid, administering three doses of IV antibiotics (no oral), personal dressing changes and suture removals, a low threshold for cultures (extended, with microbiologist consultation), knee aspiration for deep infection, wound washes, and strict sugar control.

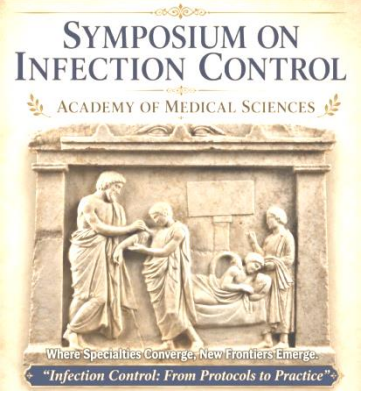


Neurosurgical SSI : Prevention, Pitfall and Salvage- A Case-Based Discussion

Dr Aditya Atal

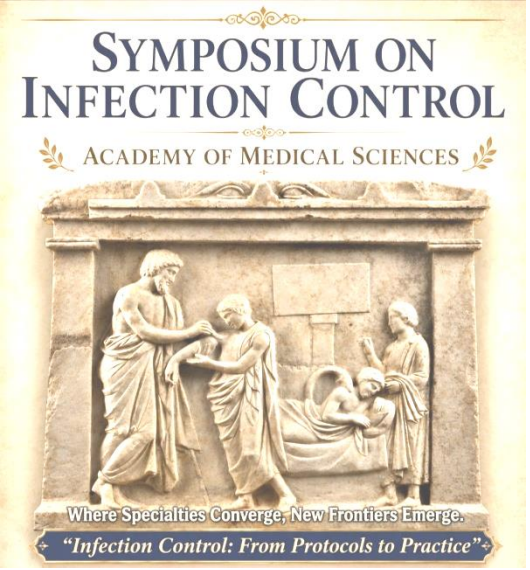
Consultant Brain and Endoscopic Spine Surgeon

Max super specialty hospital, Nagpur



Take Home Message

- ✓ **Most SSIs are preventable** → Follow the prevention bundle.
- ✓ **CSF leak increases infection risk** → Detect and repair early.H
- ✓ **High-risk patients need optimization** → Control diabetes and nutrition.
- ✓ **Early diagnosis prevents disaster** → Never ignore wound changes.
- ✓ **Timely salvage improves outcomes** → Act early with source control.

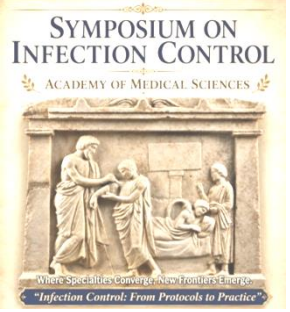


Prevention of aspiration
leading to storm of inflammation in the hospital

VAP PREVENTIVE STRATEGIES- EVIDENCE & IMPLEMENTATION

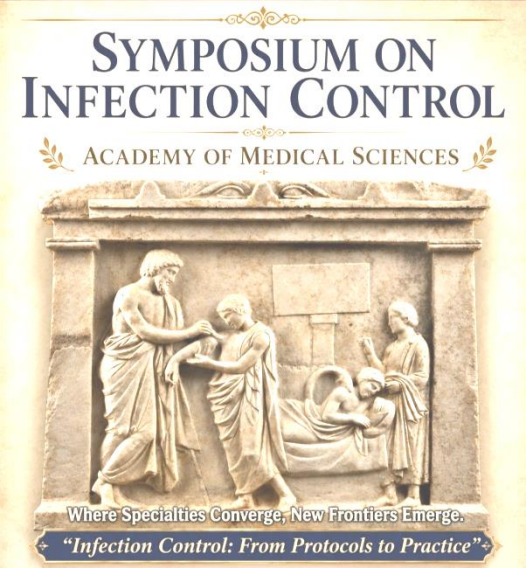
Dr. Rohit Vadala

MBBS, MD- Pulmonary Medicine, DNB Pulmonary Medicine
DM- Pulmonary, Critical Care & Sleep Medicine (AIIMS, Delhi)
Indian Diploma in Critical Care Medicine (Apollo- Chennai)
Fellowship in Sleep Medicine- Indian Sleep Disorders Association (ISDA)
Fellow College of Chest Physicians (FCCP)- American College of Chest Physicians
MRCP-SCE Respiratory Medicine (UK)
European Diploma in Adult Respiratory Medicine



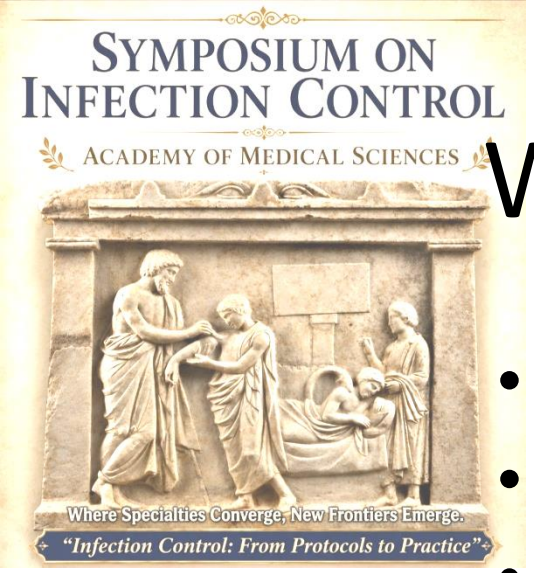
Take Home Message

1. All VAP bundle elements implemented together reduce incidence by 50–70%. No single intervention is sufficient.
2. The single best way to prevent VAP is early, safe extubation. Assess daily with SBT + SAT protocol.
3. VAP prevention is a team sport. Daily rounding, shared checklists, feedback on VAP rates, and empowering nurses to escalate non-compliance changes ICU culture.



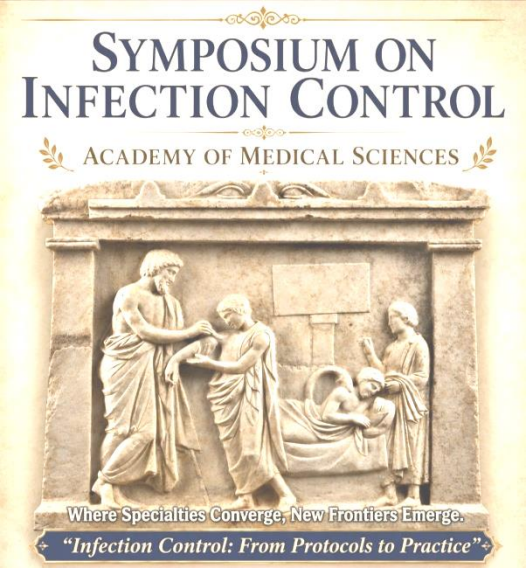
Operation Theatre Infection Prevention
What's IN and What's OUT in the OT

Dr Anuradha Deshmukh
Laboratory Director, Sr Consultant Microbiology & IPCO,
KIMS-Kingsway Hospitals, Nagpur.



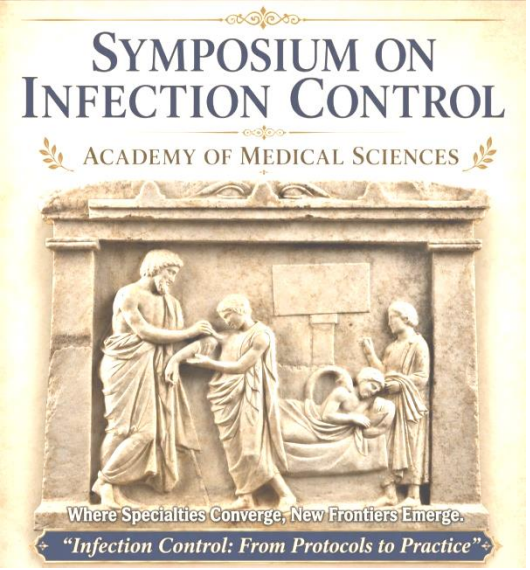
What's IN (Essential Practices)

- Strict sterility of instruments and OT setup
- Proper surgical hand scrub and PPE
- Regular OT cleaning and disinfection
- Controlled OT traffic and closed doors
- Sterile handling of implants and devices
- Infection surveillance and audit systems
- Skin preparation completed
- Biomedical waste disposed correctly
- Terminal cleaning completed



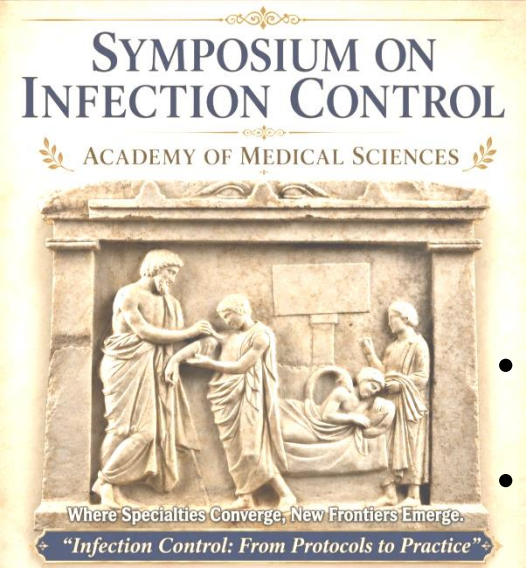
What's OUT (High-Risk Practices)

- Frequent entry and exit from OT
- Breaks in sterile technique
- Use of contaminated or expired items
- Mobile phones in sterile areas
- Poor hand hygiene or improper PPE
- Skipping OT cleaning protocols



What it takes to sterilize my instruments and curious case of Biological indicators

Dr. Niharika Lall
Consultant Microbiologist
Max Superspeciality Hospital
Nagpur



Summary : Sterilization

- Sterilization eliminates all microbial life using steam, plasma, or ETO to ensure patient safety.
- **The Core Workflow:** Instruments must go through cleaning, packaging, sterilization, and monitoring phases.
- **Monitoring Tools:** Chemical indicators track process variables (time, temperature), but only **Biological Indicators (BIs)** prove that highly resistant spores were actually killed.
- **Managing Failure:** A positive BI requires an immediate recall and **Sterilizer Efficacy Testing** (3 empty-chamber BD cycles and 3 BI test packs). Common causes include human error, skipped incubator maintenance, and improper barcode placement.
- **Key Risks:** Avoid flash sterilization for convenience, tightly control the reuse of high-bioburden luminal devices, and cross-verify all sterility testing with your lab or infection control team.