

ACADEMY OF SPINAL CORD INJURY PROFESSIONALS



Carbapenem Resistant Enterobacteriaceae (CRE) Infection Control in an Acute Rehabilitation Setting

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Background

- Patients in acute rehabilitation, including patients with spinal cord injury (SCI), are at risk of colonization and infection with drug resistant bacteria. ¹
- Carbapenem resistant enterobacteriaceae (CRE) is a drug resistant gram negative bacteria.
- CRE infection control measures are variable and depend on local infection control policies. They commonly involve:
 - Contact precautions
 - Patient isolation or cohorting
 - Hand hygiene
 - Environmental cleaning
 - Monitoring surveillance cultures ²⁻⁶
- These measures create challenges in the context of acute rehabilitation, where spending time in communal areas (like therapy gyms) is crucial to recovery. ⁷

Case Details

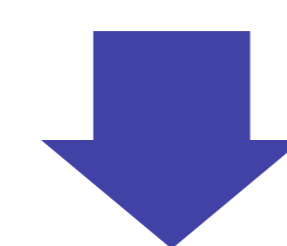
- 93 bed inpatient rehabilitation hospital (IRF)
- CRE isolated in urine of an asymptomatic SCI patient with an indwelling catheter
- Case discussed with hospital infection control, State Public Health Department with goal of optimal participation in therapies.

Case Study Details

Isolation of CRE in one asymptomatic patient's urine



Treated for CRE with Gentamycin



Obtained two negative cultures after treatment

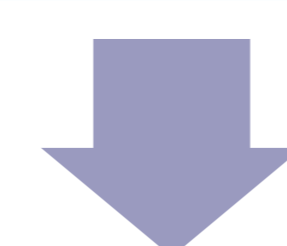


Continued precautions but able to participate in rehabilitation in communal areas

- Bathing/showering patient and cleaning wheelchair prior to leaving room
- Conscientious therapy scheduling to avoid high traffic times
- Deep cleaning therapy space after each use



Patients with potential exposure (ex. same hospital floor) were screened for CRE



All cultures returned negative

Discussion

- Previous protocols would have limited the patient to their room for all therapies for the duration of their rehabilitation.
- Limiting participation in communal areas has real implications for mental health and therapy goals.

Conclusions

- In one IRF with local high prevalence of CRE and strict isolation precaution recommendations, successful containment of CRE was demonstrated with antibiotic treatment, contact precautions, and screening of other patients.

References

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