
625 **Patient Centered Depression and Anxiety Screening in an Adult Burn Clinic**

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Introduction: Depression and anxiety are seen in burn patients at rates up to 45%. Untreated, they can lead to long-term complications of posttraumatic stress disorder. Treating the psychological consequences of burn injury leads to increased quality of life for patients.

Methods: Rapid-cycle quality improvement using four plan-do-study-act cycles was used to evaluate interventions. Reviewing the data helped guide new tests of change each cycle. Data were analyzed using run charts to assess each intervention's impact.

Results: A medical screening rate of 100% was achieved. Thirty three percent of patients screened were positive for depression and/or anxiety. Of the patients who screened positive, 100% chose an intervention on the Shared Decision Making Tool.

Conclusions: Universal screening increases recognition of anxiety and depression in a vulnerable population of burn patients. Using a Shared Decision Making tool increases patients centeredness and selecting an intervention for treatment.

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700 **Use of Antibiograms and Changes in Bacterial Resistance Patterns**

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Introduction: Infection is a leading cause of death in burn patients. With an increase in resistance patterns, management of these infections has become progressively difficult. Antibiograms, a summary of susceptibilities to bacteria in a given institution or area, are often used to guide empiric treatment of infections. However, inappropriate prescribing and use of empiric antimicrobials may greatly impact the incidence of resistance. Currently, we do not know the patterns of antibiotic use since the introduction of institutional antibiograms or associated changes in antibiotic resistance. The objective of this study is to describe trends in antibiotic susceptibilities in burn patients in Canada pre- (PrA) and post-introduction (PoA) of antibiograms.

Methods: We performed a retrospective review of patients admitted to an ABA-verified Burn Centre 2 years pre- (2013-2014) and post-introduction (2016-2017) of institutional antibiograms and started on broad-spectrum antibiotics (meropenem, piperacillin-tazobactam, and/or vancomycin).

Results: A total of 864 patients were admitted during the study period ($n=420$ PrA and $n=444$ PoA). Average age, % total body surface area (%TBSA), and length of stay were similar between cohorts. Administration of empiric meropenem increased (43.2% vs. 56.8%) and piperacillin-tazobactam decreased (60.6% vs. 39.4%), which was significant ($p=0.002$). The use of vancomycin was unchanged. There was a significant decrease in the overall use of empiric antibiotics ($p=0.002$) since the inception of antibiograms, with a significant improvement in culture and sensitivity (C&S) testing within 5 days of starting empiric antibiotics ($p=0.002$). There was no significant difference in use of targeted antibiotics pre- or post-antibiogram introduction.

Conclusions: Our study demonstrates that since the inception of antibiograms, there has been a significant decrease in overall use of empiric antibiotics and improvement in acquiring C&S within 5 days. However, these antibiotics were not always targeted to the appropriate organism and therefore may contribute to multi-drug resistant organisms in a burn population.