Outcome of septic cancer patients admitted to the intensive care unit with and without medical emergency team intervention

Imran Khalid, Anan A Saeedi, Halah Alkamli, Khaled Al Harbi, Mazen Kadri and Ismael A Qushmaq
King Faisal Specialist Hospital & Research Center, Jeddah

Background: Cancer patients with sepsis have high mortality. However, there is limited data regarding outcome of septic ward patients who are admitted to the intensive care unit (ICU) with and without Medical Emergency Team (MET) intervention. We evaluated this question in our study.

Methods: MET in our hospital includes a critical care nurse, a physician and a respiratory therapist. We evaluated 4852 oncology ward patients from January 2009 to July 2011. 139 patients were included in analysis who were admitted to the ICU and divided into MET transfers (admitted to ICU after MET involvement) and Non-MET transfers. Primary outcome was 28-day mortality. Data was analyzed using t-test and Pearson chi-square test, as appropriate.

Results: Out of 139 ICU transfers, 91 were MET transfers and 48 were non-MET transfers. The MET and Non-MET patients had similar APACHE II scores (22.1 vs. 23.4; p=0.07). However, MET transfers as compared to Non-MET transfers had lower rates of intubation (47% vs. 66%; p=0.03), lower ICU mortality (41% vs. 62%; p=0.02), and lower 28-day mortality (43% vs. 65%; p=0.01). Among the non-MET patients, 84% fulfilled the Hospital MET activation and Systemic Inflammatory Response Syndrome (SIRS) criteria up to six hours prior to ICU admission. Non-MET transfers had delayed initiation of resuscitation, transfer to ICU and normalization of lactic acid (p<0.04).

Conclusion: Septic cancer patients on the wards have better outcome if MET is activated in time. Most of these patients exhibit SIRS criteria which should prompt immediate MET activation. MET improves outcome in these patients through early management with the help of critical care nurses and prompt ICU transfer.

Biography
Imran Khalid is a Staff Physician at John D Dingell VA Medical Center in Detroit, USA and a Consultant Intensivist at King Faisal Specialist Hospital & Research Center, Jeddah. He is Board Certified by American Board of Internal Medicine in Internal medicine, Pulmonary, Critical Care and Sleep Medicine. He is interested in clinical research and has published more than 20 papers and numerous abstracts in peer reviewed journals. He also serves on the editorial boards of six peer reviewed journals.

doc_ik@yahoo.com