Supportive and palliative care

Determining the value of routine Palliative Prognostic Index (PPI) calculations in a palliative care unit

D.A. Thaker, A. Veltre, A. Smith, C. Orth, B. Stafford
Palliative Care Unit, Redcliffe Hospital, Brisbane, Australia

Aim/Background: Our study aims to investigate the value of utilising PPI scores on a regular basis. We examined the application of the PPI for all admissions to a palliative care unit and determine its prognostic accuracy in cancer and non-cancer patients.

Methods: The study included 106 patients admitted over a three month period. The patients were separated into two categories: (A) Cancer diagnosis (B) Non-cancer diagnosis and then into subgroups based on the PPI score on admission. Group 1 patients with a PPI < 4, group 2 with a PPI of > 4 but ≤ 6 and group 3 with a PPI of > 6. During admission, the PPI score was reassessed and recorded each week. Outcome of each patient was recorded and compared with the predicted survival by the PPI.

Results: Category A included 76 patients - 47 males and 29 females. The mean age was 71 years. The median PPI on admission was 5. Groups 1 had longer average survival time (72 days) than group 2 & 3 (16 & 5 days). Category B included 30 patients - 17 males and 13 females. The mean age was 76 years. The median PPI on admission was 9.5. There were no patients in group 2, three patients in Group 1 and their average survival time was 138 days, while 28 patients in Group 3 and their average survival time was 9 days. PPI >6 was calculated as a predictor of <3 weeks survival: sensitivity was 77% (95% CI 66-86%) and specificity was 70% (50-86%) for all patients; sensitivity was 96% (95% CI 80-100%) and specificity was 60% (95% CI 15-95%) for category A patients; sensitivity was 69% (95% CI 55-80%) and specificity was 72% (95% CI 50-89%) for category B patients. 12 patients (15%) from category A had worsening PPI on weekly calculations.

Conclusions: Cancer patients with a lower PPI (< 4) on admission had average survival of >6 weeks. Weekly calculation of PPI during admission can help to predict changing prognosis and notify patients and their families in time. PPI scoring is also beneficial for discharge planning if low score remains stable during admission. Most of the Patients with a non-cancer diagnosis had PPI of >6. It confirms that this group of patients are referred to the palliative care in terminal stage and routine use of PPI is unlikely to be beneficial for prognostication. Further evaluation of PPI scoring in palliative patients from community and respite care settings is needed.

Disclosure: All authors have declared no conflicts of interest.