Looking beyond fractures: multidisciplinary care of acute orthopaedic injuries in older people

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Current issue: Depression, dementia, polypharmacy drug interactions and poor nutrition frequently remain unrecognised during the acute admission of the elderly person with acute orthopaedic injuries. This leads to potentially avoidable physical, psychological and social decline. Protection against functional decline is imperative to maintaining quality of life and remaining in the family home. In rural areas where public transport and infrastructure is limited this need is heightened. At Northeast Health Wangaratta (NHW), a multidisciplinary early intervention approach to managing older patients with acute orthopaedic injuries was recognised as important to predicting poor outcomes.

Method: physician-led multidisciplinary team review of all acute orthopaedic admissions over age 70 during a six-month period in 2011–12. Audit was undertaken by final-year medical students to document investigations, surgical and medical complications, length of stay and discharge status. Patients in the intervention group were compared with a control group over a similar six-month period in 2010–11.

Results: 52 patients had physician reviews in the audit period. Ninety-two patients were in the control group. There were no differences between the groups in demographics, orthopaedic diagnosis or known co-morbidities on admission. The audit showed both the intervention group and control group had similar treatment and investigation to reduce the likelihood of immediate post-operative complications. Screening by the multidisciplinary team in the intervention group identified clinically significant depression, vitamin D deficiency and functional decline. The average modified Barthel’s score deteriorated from pre-admission to discharge, indicating that acute orthopaedic injuries have a significant effect on long-term functioning. Importantly post-operative delirium was more readily recognised and treated in the intervention group. This was attributed to the identification of symptomatology by the gerontology nurse practitioners who work alongside physicians at NHW.
Insights: This project raised awareness of the high prevalence of unrecognised depression and vitamin D deficiency. Importantly, multidisciplinary teams showed the potential to improve care through recognition of delirium and functional scoring. The next step is further integration with primary care, including better communication with GPs and carers to ensure that depression, vitamin D deficiency and functional decline identified with the Barthel’s score is followed up.

As medical students we are committed to a brighter future for elderly members of our rural community. This audit highlighted for us the importance of teamwork and looking beyond fractures.