

Commentary on a Geriatric Hip Care Bundle for Managing Delirium

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Description

There are ever-increasing practice recommendations aimed at diagnosing and preventing delirium on healthcare systems worldwide. Hong Kong has seen a sharp rise in life expectancy between 1985 and 2015 [1] and with this ageing population, there is a larger proportion of patients at increased risk of hip fractures. Chinese older adults with acute medical illnesses [2] had a combined prevalence of delirium and sub-syndromal delirium of 27%. The published guidelines from national bodies in Australia [3], America and the UK [4] emphasized early recognition of cognitive impairment and multimodal analgesia. The engagement of a multi-disciplinary team is still the most effective measure of preventing or managing Post-Operative Delirium (POD) [5].

I wanted to highlight some key points in the article on delirium [6].

1. The results were gathered from an observational study (a before-and-after trial), not a randomized controlled study. The authors acknowledge that there will be likelihood of reporting bias and its limitations. However I believe a care bundle intervention is perfectly designed for an observational study, as there should be an improvement in both end-point outcomes (in this case, the incidence of POD) and in institutional factors which may affect the care of patients at risk of delirium, such as healthcare practitioners becoming more confident in diagnosing POD or the geography of a ward being more user-friendly for patients. A randomized controlled trial would have been logistically difficult to execute, requiring two identical but separate wards. We would not be able to blind any of the practitioners or participants for a randomized controlled trial either. All of our data was collected prospectively to try and eliminate any historical bias. The short CAM questionnaire that was used to identify delirium is standardized and we ensured the participants using it were well-trained in assessing delirium.
2. 39 Patients were excluded in order to have equal numbers in the control and intervention group. I understand that there would have been no change in the primary outcome data, although it would be useful to include these data points when analyzing the secondary outcomes, especially as the n number=77 in each cohort.
3. It was interesting that the control group had a statistically significant higher number of post-operative orthopaedic complications compared to the intervention group (23.4% v 9.2%). The medical basis for this could be due to regional Anaesthesia techniques causing a blood loss sparing effect. I note that a lot of the control group still received a spinal anesthetic.
4. The caretaker empowerment programme is the most unique element of our

multi-component care bundle. It would have been interesting to collect data about the compliance rate of this programme and whether the caretakers themselves felt confident in helping the patient in the recovery period. I note this study was pragmatic and did not allow caretakers to stay overnight, a time when delirium can be most profound. The caretaker role appears to be much more extensive and all-encompassing in Asian countries (where multi-generational families live together for longer), compared to Western society and therefore this programme was an ideal measure to reduce the social burden of delirium.

Conclusion

In summary, this manuscript highlighted compelling evidence, in a pragmatic manner, that a peri-operative multi-component care bundle has been a vast improvement on the existing hip fracture pathway for patients in a tertiary care Hong Kong hospital. I felt it gave great starter points for other units that may be considering how to best introduce delirium management measures as well as the common pitfalls encountered.

References

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