Prevention & Management of Post-Operative Delirium (POD)

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Introduction
Delirium is a syndrome characterized by the acute onset of cerebral dysfunction with a change or fluctuation in baseline mental status, inattention, and either disorganized thinking or an altered level of consciousness.

The cardinal features of delirium are:
1) Disturbed level of consciousness (i.e. a reduced clarity of awareness of the environment), with a reduced ability to focus, sustain, or shift attention;
2) Either a change in cognition (i.e. memory deficit, disorientation, language disturbance), or the development of a perceptual disturbance (i.e. hallucinations, delusions).

Although POD is often thought of as a temporary phenomenon it has been linked with post-operative cognitive dysfunction (POCD) and also other morbidity/mortality. POD often leads to delayed/reduced mobilisation, poor nutrition and poor compliance with other aspects of post-operative care.

Aim
Use screening tools to identify patients at risk of POD preoperatively, the management of these patients intraoperatively can then be altered to reduce their risk.

Preoperative phase

Elective surgery
1) POA Nurse led Frailty Screen
   • Rockwood Clinical Frailty Scale (CFS) – see Appendix 1
   • Single Question in Delirium (SQiD)
     • ‘Are you aware of any memory problems in the past 6 months’
     • Enquiry if there is a current diagnosis of dementia
   If CFS ≥5 or answer to b) or c) is positive, progress to Comprehensive Geriatric Assessment
2) Comprehensive Geriatric Assessment
   • Edmonton Frail Scale (EFS)
   • 4AT
   • Delirium risk factors
   • If EFS ≥3, 4AT ≥ 0 or delirium risk factors ≥4, progress to SDM and optimisation
3) Shared Decision Making Discussion (SDM) & Optimisation Strategy
   • Refer to anaesthetist for consideration of SDM discussion
   • Consider referral to optimisation (invigor8, HARP, Falls service)
   • If progresses to surgery, notify ‘increased risk of delirium’ on theatre list and at handover to postoperative destination.

Emergency surgery
• Global clinical assessment for delirium as part of anaesthetic preoperative assessment
  • Rockwood Clinical Frailty Scale
  • Delirium Risk Factors

Intraoperative phase

Preoperative
• Assess risk for post operative delirium
• Avoid benzodiazepine
• Avoid prolonged fasting times (encourage clear fluids until 2 hours pre-op)

Anaesthesia
• Direct continuous monitoring of patient
• Consider arterial blood pressure
• Avoid midline incisions
• Avoid muscle relaxants
• Avoid antibiotics

Post-operative phase

Recovery room
• Use NuDESC tool in recovery to assess for delirium – see Appendix 5
• If NuDESC score ≥2
  • Document high risk of delirium on recovery chart for handover
  • Assess pain and consider analgesia
  • Attempt orientation, noise reduction and ensure hearing and visual aids in place
  • Commence TIME bundle and delirium care plan on arrival in post operative destination

Post-operative care beyond the recovery room
• all patients aged 65 and above or with a suspected delirium or signs of confusion should be assessed on admission to the ward or day surgery from recovery using the 4AT
• if the patient scores 4 or above using the 4AT, both the TIME bundle and a delirium care plan should be commenced
• the management of delirium should start with non-pharmacological management and only move to pharmacological management if the patient is felt to be either a risk to themselves or others

Conclusion
This guideline is now in use across A&A since December 2020 with patients being routinely screened and managed in a way to reduce the prevalence of post-operative delirium. This will form the basis of future data collection cycles.

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