

Fasting Audit in Orthopaedic and Orthogeriatric Unit Patients

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Background

Frequent and/or prolonged fasting has been observed in some orthopaedic (ortho.) and orthogeriatric unit patients. Fasting increases the energy deficit, which can contribute to the development of malnutrition. It can also increase the risk of both dehydration and hypoglycaemia in patients with diabetes mellitus.

Methods

- Ethics approval was granted by Western Health (WH) ethics committee.
- The audit methodology and data collection tools were developed by the dietitians.
- Data collection was completed by 2 Victoria University Masters students.
- Data analysis was completed by the dietetic students and the supervising dietitian.

Results

Table 1 - Patient characteristics

Age (years)	Mean 60 years (18-96)
Gender	52% male, 48% female
Waiting list	33% elective, 67% non elective

Table 2 Duration of preoperative fasting (as specified by the anaesthetist or ortho team)

	Elective	Non-elective
0-4 hours	0	7%
4- 8 hours	20%	23%
> 8 hours	80%	70%

- The longest cumulative duration of fasting prior to theatre was 68 hours. The patient was 86 years old and was fasted 5 times prior to theatre.
- **The mean duration of fasting from all fluids and solids prior to theatre was 11.2 hours for elective patients and 10.8 hours for non elective patients.**
- 54% of non elective patients had their theatre cancelled or rescheduled at least once during their admission.
- No patients received clear fluids within 3 hours prior to theatre and 7% of patients received solids within 7 hours prior to theatre.

- All nurses, except for a bank nurse, thought that frequent and/or prolonged fasting is an issue for orthopaedic and orthogeriatric unit patients.

Discussion

The audit highlighted that pre-operative fasting practices in orthopaedic and orthogeriatric unit patients can be improved upon.

A WH Fasting Procedure for All Patients Requiring Anaesthesia has since been developed and implemented in these units.

Adult patients are permitted to have limited clear fluids $\leq 200\text{ml/hour}$ up to 2 hours and limited solids up to 6 hours prior to anaesthesia, consistent with the Australia and New Zealand College of Anaesthetists guidelines.

Acknowledgements

- Rhana Randle and Melinda Braithwaite, Masters Dietetic students, Victoria University
- Forbes McGain, Anaesthetist, Western Health
- Claire McKie, Geriatrician, Western Health