REDUCING PROLONGED FASTING FOR INPATIENTS HAVING INTERVENTIONAL RADIOLOGY (IR) PROCEDURES : A QUALITY IMPROVEMENT PROJECT

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Interventional Radiology

BACKGROUND

Pre-procedural fasting is required for induction of anaesthesia or administration of conscious sedation. The traditional pre-operative instructions of 'Nil by mouth' from midnight or 2am continues throughout the trust despite the updated pre-procedural fasting policy that has been in place since 2019. As a result, many of our patients are unnecessarily instructed to abstain from all oral intake for a prolonged period.

OBJECTIVES

This quality improvement project aims to:

- Reduce unnecessary prolonged fasting period for patients scheduled to have a procedure in Interventional Radiology.
- Encourage ward nurses to ensure patient continue to have prescribed oral medications despite their fasting status.
- Successfully implement and emphasize the Trust's '1, 6 Rule'; to encourage intake of food and non-clear fluids up to 6 hours before a procedure and to encourage the intake of clear fluids up to 1 hour prior to the procedure.

METHODOLOGY

Inpatients scheduled for IR procedures the next day were reviewed daily by the authors. Those due to have procedures done in the afternoon of the next day were identified. Ward nurses were instructed to allow patients to have light early breakfast, continue with oral medications, and to encourage hydration until they are sent for their procedure. Data were collected from October and November 2023, changes implemented, and data collected again in January and February 2024.

RESULTS

Retrospective Data (October and November 2023)

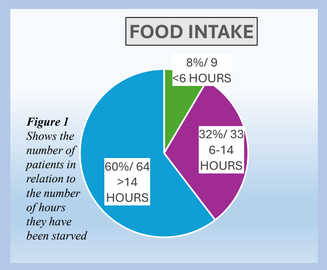


Figure 1 Shows the number of patients in relation to the number of hours they have been starved

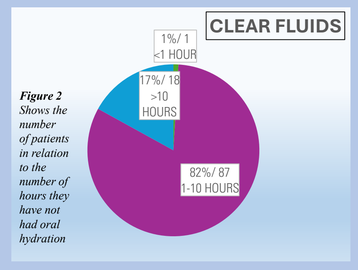


Figure 2 Shows the number of patients in relation to the number of hours they have not had oral hydration

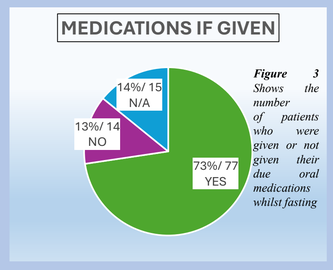


Figure 3 Shows the number of patients who were given or not given their due oral medications whilst fasting

Based on 106 inpatients for which the retrospective data (October and November 2023) were gathered; we have identified the length of period patients were starved, with no hydration and if oral medications have been administered despite their fasting status.

Interventional Data (January and February 2024)

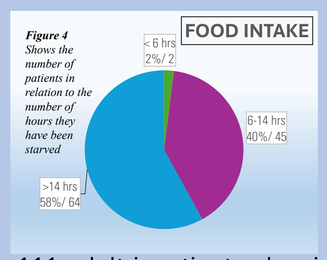


Figure 4 Shows the number of patients in relation to the number of hours they have been starved

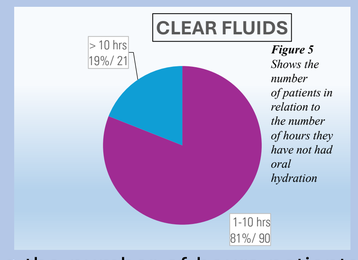


Figure 5 Shows the number of patients in relation to the number of hours they have not had oral hydration

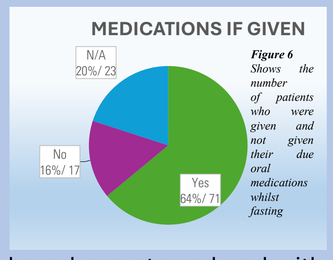


Figure 6 Shows the number of patients who were given and not given their due oral medications whilst fasting

Based on 111 adult inpatients showing the number of hours patients have been starved and with no hydration and the likelihood of these patients being given their due oral medications whilst fasting.

DISCUSSION

Comparing the data we collected, the number patients who were starved for more than 14 hours was reduced by 2% following our intervention. There was a 2% increase in number of patients who were not given clear fluids for more than 10 hours; and a 4% decrease in the number of patients who received oral medications whilst fasting. We found that despite speaking to ward nurses and sometimes attending the ward to speak to the patients with instructions, these were frequently ignored. Fear of procedures being cancelled due to patients not being fasted, ignorance of the trust pre-procedural fasting policy, lack of handover from night nurses to morning teams, and persist use of the term 'nil by mouth' by doctors were some of the reasons we identified for this.

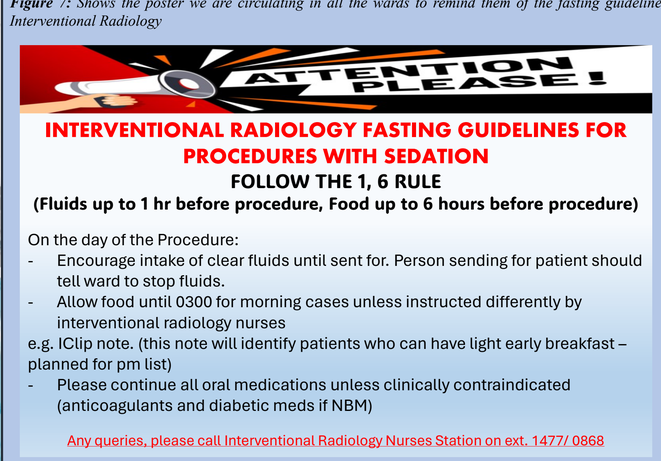
CONCLUSION

Comparing the retrospective and interventional data, we were only able to achieve a small improvement in the reduction of our patient's overall fasting period. However, we have received favourable responses from patients who were allowed to have light early breakfast on the day of their procedure.

RECOMMENDATIONS

- List planning with identification of patients who can have a light early breakfast on the day of their procedure and cooperation between IR and ward nurses js critical to the successful implementation of individualised pre-procedural instructions.
- Instructions should continue to be relayed to the ward together with a documentation on Iclip.
- Staff should be encouraged to stop using the term 'nil by mouth', instead, to specify the time the patient can have food until, and continue clear fluids and oral medications until they are sent for their procedure.

Figure 7: *Shows the poster we are circulating in all the wards to remind them of the fasting guidelines in Interventional Radiology*



ACKNOWLEDGMENTS

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REFERENCES

- Dr Sarah Wilkinson, Dr Jane O'Riordan; Adult Perioperative Fasting Policy, February 2020, St George's Hospital
- Practice Guidelines for Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures; American Society of Anesthesiologists 2023