

“ MUST patients be malnourished before surgery?”
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Background

Malnutrition & Obesity can have a serious impact on a person's clinical outcome following a surgical procedure. Malnutrition leads to reduced immune function & poor wound healing (1) and thus can result in longer hospital stay (2). Studies have shown that malnutrition is modifiable yet still continues to cost the NHS 7.3 billion pounds a year. Nutrition support can reduce the length of stay in hospital & lower the rate of complications post surgery (3). Obesity costs the NHS half a billion pounds a year & it is well documented that obesity increases the risk of postoperative complications (4). There is a growing concern that a number of surgical patients requiring Dietetic intervention, are passing through to the preoperative department having been undetected from Wrexham Maelor Hospital (WMH) general outpatients department. As there is a part time Dietitian available in the preoperative department, the pre-op staff are able to detect malnutrition, obesity & other conditions requiring Dietetic intervention & thus refer patients. Unfortunately this referral can be days or weeks before their surgical procedure, which leaves little time for Dietetic intervention to increase or reduce a patient's Body Mass Index (BMI) to within a normal range prior to surgery. NICE guidelines (CG32) recommend that Nutritional screening should take place at the very first consultation in the outpatients department, providing more time for intervention to be effective. The aim of the audit is to quantify the number of patients attending preoperative assessment who require Dietetic intervention.

Method

Every patient attending the preoperative department will be screened using BAPEN Malnutrition Universal Screening Tool (MUST) (5). Other data to be recorded will be BMI, waist circumference & haemoglobin levels pre surgery. The average waiting time from the patient's first outpatient appointment to their surgical procedure will be documented, as well as waiting time from pre op to surgery. A referral criteria for dietetic intervention was established -Patients with a BMI above 30 (obese), patients with a BMI of 19 & below (underweight) & a MUST score of 2 or above indicating a high risk of becoming malnourished. The audit is registered with the audit office in WMH & can therefore be repeated at a later date.

Results

74 patients attending the preoperative department in a five-day period, between 29th May and 4th June 2007, were nutritionally screened. 17% of patients scored a MUST of 2 or above indicating that they were at risk of becoming malnourished. 1 patient was classed as underweight, with a BMI of 19. 25% of patients had a BMI of above 30 (obese). The obese patients also had above the recommended waist circumference, putting them at an increased risk of developing obesity related diseases. 26% of men were at risk of developing anaemia as they had below their recommended levels of Haemoglobin. The average number of days waiting from their preoperative assessment to their surgical procedure was 18 days. The average number of days waiting from the patient's first appointment with the consultant to their surgical procedure was 106 days (15 weeks). Overall 57% of patients required dietary advice for the risk of malnutrition & treatment of obesity. The Dietitian conducting the audit provided adequate literature and dietary advice to suit each individual's lifestyle. Follow up appointments were also offered.

Conclusion

Over half of patients attending the preoperative department required Dietetic intervention as there were a high incidence of patients who were obese, at risk of becoming malnourished & also patients at risk of developing anaemia. The results show that there is currently insufficient time available for Dietetic intervention to treat obese patients, between preoperative assessment & surgery. However if nutritional screening occurs in every surgical patient attending the outpatients department, they would be highlighted earlier on & therefore provide more time for Dietetic intervention to make a contribution, to the health of these patients pre & postoperatively.

References

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