

## **Weight change post oesophagectomy for carcinoma of oesophagus**

### **Abstract:**

**OBJECTIVE:** To determine the pattern of weight changes observed in postoperative oesophagectomy patients at the Kenyatta National Hospital and evaluate weight change with selected preoperative variables. **DESIGN:** A prospective analysis of post-operative weight change of patients following oesophagectomy utilising body mass index (BMI). **SETTING:** The cardiothoracic unit, Kenyatta National Hospital, Nairobi. **SUBJECTS:** All patients with oesophageal cancer, with a confirmed histological diagnosis of squamous cell carcinoma and discharged post oesophagectomy. **INTERVENTION:** Oesophagectomy. **MAIN OUTCOME MEASURE:** Changes observed in the BMI during respective clinic visits. **RESULTS:** Fifty nine patients were enrolled into the study with a mean preoperative weight of 50.4 kilograms and mean BMI of 19.4 kg/m<sup>2</sup> (+/- 4.3). Sixty seven point seven percent of patients preoperatively fell into the underweight category (less than 20kg/m<sup>2</sup>); normal were 16 patients (27.1%) and overweight included six patients (10.2%). Postoperatively the majority of patients continued to lose weight and the overall average BMI at the study endpoint was calculated as 18.0 kg/m<sup>2</sup> (+/- 3.2). This value was significantly lower compared with the preoperative value ( $p = 0.004$ ). None of the selected variables showed a significant relationship to the postoperative weight change pattern observed, though the patients gaining weight postoperatively had an apparently better survival pattern compared to the others. Analysis of the selected variables versus weight change pattern (gain, stable or weight loss) showed no significant relationships. **CONCLUSION:** This study population presented a lower initial preoperative weight compared to similar studies from the developed world, with the majority being underweight. The majority of patients exhibited a continued postoperative weight loss with only a small number showing any weight gain. The study unfortunately was not able to demonstrate association of weight change with any of the selected variables.