

ABSTRACT

Background: Most patients with malignant obstructive jaundice (MOJ) present with non-resectable disease. Non curative laparotomy has been associated with adverse outcome. There is need to predict non-resectable disease and prepare patients for planned palliative procedures.

Objective: To study the utility of Ca 19-9 serum levels and CT scan in predicting the non-resectability of MOJ tumours at Kenyatta National Hospital.

Methods: Eligible consenting patients were recruited. All had a CT scan of the abdomen and serum CA 19-9 levels determined preoperatively and staging was done using the LRCC criteria. At surgery, intraoperative findings were then compared in terms of non-resectability with the preoperative CT scan prediction and the CA 19-9 levels.

Results: A total of 49 patients were recruited into the study. During the study, 14 patients were later excluded due to inadequate information of imaging, non-surgical intervention or pre-operative death. At a confidence level of 95%, CA 19-9 level of 466 has 92.3% sensitivity and 100% specificity indicative of non resectability in MOJ lesions. When compared with intra-operative findings on non-resectability, the cut off level of 466 has a positive and negative predictive value of CA19-9 was 100% and 71.4%, respectively. CT scan had 85.2% sensitivity and 100% specificity on predicting non resectability of MOJ lesions, 84% sensitivity in detecting nodal involvement but predicted only 33% of liver metastases.

Conclusion: Combining CA 19-9 levels and CT scan are useful tools in detecting non resectability of MOJ lesions preoperatively.