Background: Colorectal cancer is one of the most common solid tumors affecting people around the world. Risk factors include age, a diet rich in fat and cholesterol, inflammatory bowel disease and genetic predisposition. Intestinal obstruction occurs in up to 28% of patients with a history of colorectal cancer. In general, patients with malignant intestinal obstruction suffer greater operative morbidity and mortality than those who present for elective resection of non-obstructing colonic tumors. Moreover patients who present with obstruction have a five year survival rate of less than 20%, a far poorer prognosis than patients who present without obstruction. The aim of this study was to evaluate the role of colorectal cancer in development of bowel obstruction and to determine the optimal management of bowel obstruction in patients with colorectal cancer.

Methods: A retrospective study was developed from 154 patients with acute bowel obstruction undergoing colonic resection at the Clinic of Surgery of the ‘Heratsi’ University Hospital. Median patient age was 63 years (range: 49-73). Among them 83 (54%) of the patients with large bowel obstruction had sigmoid colon carcinomas, 37 (24%) - descending colon carcinomas, 28 (18%) - ascending colon carcinomas, 6 (4%) - rectum carcinomas. All patients enrolled accepted preoperative laboratory examination including abdominal and chest x-ray, abdominal ultrasound or CT scan of the abdomen and pelvis. Patients included in study underwent major emergency operations. All patients were confirmed to have a malignant tumor after postoperative pathologic examination.

Results: Short-term postoperative data and medium-term recurrence and survival were compared and analyzed. The disease site varied with the pathology. Overall, the sigmoid colon was the commonest. Resection and anastomosis was generally performed for right-sided lesions, whereas Hartmann’s operation was the commonest procedure for more distally situated neoplastic lesions. A loop diverting colostomy was used most commonly in patients with peritonitis. Six patients developed pulmonary postoperative complications, three: myocardial infarction and two patients suffered a cerebrovascular accident. There were 5 anastomotic leaks. Four patients required further surgery to relieve postoperative small bowel obstruction. Eight patients died post-operatively (25 days), an overall postoperative mortality rate of 5.2%.

Conclusion: We found complication rates were equal when single-stage and multi-stage procedures were compared. With the mortality not significantly different between single-stage and multi-stage procedures and a purported survival advantage, trends shifted toward single-stage procedures.