**Presentation Title** The assessment of perioperative risk factors of anastomotic leakage after intestinal surgeries; a prospective study

**Presenter Name** Selmy Awad1\* ,

**Co-author names**

Ahmed Ibrahim Abd El‑Rahman1 , Ashraf Abbas1 , Waleed Althobaiti2 , Shaker Alfaran2 , Saleh Alghamdi2

1 General Surgery Department, Mansoura University Hospitals, Mansoura 35516, Egypt.

2 General Surgery Department, King Faisal Medical Complex, Taif, Saudi Arabia.

**Abstract:**

Background: Anastomotic leaks (AL) are among the most serious complications due to the substantial impact on the quality of life and mortality. Inspite of the advance in diagnostic tools such as laboratory tests and radiological adjuncts, only moderate improvement has been recorded in the rate of detected leaks. The purpose of the research was to assess the perioperative risk factors for AL.

Methods: This study was achieved at MUH and MIH/Egypt within the period between January 2016 and January 2019 for the candidates who underwent bowel anastomosis for small intestinal (except duodenal one) and colorectal pathology. The collected data were analyzed using SPSS of V-26.

Results: This study included 315 cases, among them, 27 cases (8.57%) developed AL. The percentage of covering stoma was signifcantly higher in the non-leakage group vs leakage one (24.3% vs 11.1% respectively). lower albumin, operative timing, perforation, and covering stoma were shown as signifcant risk factors for leakage, but with multivar‑ iate analysis for these factors, the emergency operation, and serum albumin level was the only independent risk fac‑ tors that revealed the signifcance consequently (p=0.043, p=0.015). The analysis of diferent predictors of AL on the third day showed that the cut-of point in RR was 29 with 83% sensitivity and 92% specifcity in prediction of leakage, the cut-of point in RR was 118 with 74% sensitivity and 87% specifcity in prediction of leakage and the cut-of point in CRP was 184.7 with 82% sensitivity and 88% specifcity in prediction of AL and all had statistically signifcant value.

Conclusions: The preoperative serum albumin level and the emergency operations are independent risk factors for anastomotic leakage. Moreover, leakage should be highly suspected in cases with rising respiratory rate, heart rate, and CRP levels.

Keywords: Anastomosis, Intestinal, Leakage, Predictors

**Biography of presenting author** (should not exceed 100 words)

Dr. Selmy studied MBBS at faculty of medicine, Mansoura University, Egypt, and graduated as an assistant lecturer of general surgery in 2007 after finishing a master’s degree in GS. he then joined the unit of trauma and acute care surgery at Mansoura university hospitals, Mansoura, Egypt. He received his MD degree in 2012 at the same institution to be a lecturer of trauma and acute care surgery. He obtained the position of an Assistant Professor at the same institution till now. He has published more than 31 research articles and a reviewer in different international journals. He obtained the position of a consultant of GS at king Faisal medical complex, Taif, KSA as a temporary contract.

**Details of presenting author to be mentioned in the certificate:**

Name: Selmy Awad

Affiliation: Mansoura faculty of medicine, Mansoura university

Country: Egypt

**Other Details:**

Presentation Category: (Oral Presentation)

Session Name:

Email: [selmysabry2007@yahoo.com](file:///D:\supervision%20and%20publiation\selmysabry2007@yahoo.com%20)

Alternative email: selmysabry2007@mans.edu.eg

Contact Number:00201030036362/00966556466097

Twitter/Facebook/LinkedIn:

Recent Photograph: (High Resolution)

