

ASSESSMENT OF STAPLED INTESTINAL ANASTOMOSIS

Thesis

Submitted for Partial fulfillment of
Master Degree in General Surgery

By

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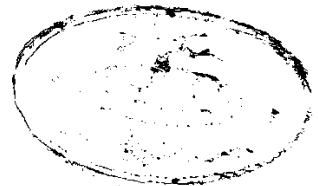
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ

خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ

اقْرَأْ وَرَبُّكَ الْأَكْرَمُ الَّذِي عَلَّمَ بِالْقَلَمِ

عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ

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INTRODUCTION

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Anastomotic dehiscence remains the main cause of morbidity and mortality of intestinal resections. The incidence of overt dehiscence varies from 0.1% to 30% in the literature. This led to the struggle of various authors to achieve better results regarding techniques and suture materials. Surgical stapling gained importance among surgeons due to its technical advantages (*Genzini et al., 1992*).

The mechanical staplers facilitate the construction of a rapid reliable intestinal anastomosis. It has proved to be most effective in limiting anastomotic leak (*Fujimoto et al., 1991*).

The application of stapling devices in gastro-intestinal surgery has reached a stage where most classical operations can be performed exclusively with these instruments. New techniques and applications are being regularly reported

together with modifications in stapler design (*Glazer and Dudley, 1988*).

Mechanical suturing of the bowel assures many of the factors desirable in any bowel anastomosis or closure; complete immobility and cooperation of the structures to be stapled, avoiding shifting and minimal tearing that occur in even the most carefully hand - performed suture, needle and suture holes that are of the same fine caliber; since the stapled anastomosis proceeds with minimal local reaction and adhesion formation (*Ravitch and Steichen, 1979*).

The advantages of the use of mechanical stapling can above all be seen in anastomosis, particularly high risk areas like oesophago-jejuna anastomosis, in which there is a lower incidence of dehiscence and mortality than when manual suturing are used (*Drago et al., 1994*).

However this is still very controversial, so in order to understand the Pathophysiology of anastomosis, it is necessary to study the events involved in intestinal healing after resection, as well as the technique, material used and the factors related to anastomotic failure.