

## بسم الله الرحمن الرحيم









شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





## جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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#### بسم الله الرحمن الرحيم

Aculty of Medicine
Lienoufiya University

## PROSPECTIVE STUDY OF LAPAROSCOPIC VERSUS OPEN COLONIC RESECTION FOR CARCINOMA

Thesis

Submitted for partial fulfillment of doctor degree

<u>In</u>

**General Surgery** 

<u>By</u>

Dr. Sherif Youssef Ahmed Hassan

MS, Alexandria
Specialist of General Surgery,
Armed Forces Hospital,
Alexandria.

#### <u>Supervisors</u>

Prof. Dr. Mahmoud Badawy Mahmoud

Professor of General Surgery & Surgery of
GIT and Endoscopes,
Faculty of Medicine,
Menoufiya University.

Prof. Dr. Samir Mohamed Kohla

Professor of General Surgery, Faculty of Medicine, Menoufiya University.

Dr. Said Gamal El-Din Askar

sistant Professor of General Surgery, Faculty of Medicine, Menoufiya University.

Prof. Dr. Awatef El-Said Farghally

Professor of General Surgery Faculty of Medicine, Menoufiya University.

Dr. Ahmed Farag El-Kased

Lecturer of General Surgery & Surgical Oncology, Faculty of Medicine, Menoufiya University.

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#### <u>Discuss By</u>

#### Prof. Dr. Mahmoud Badawy Mahmoud

Professor of General Surgery & Surgery of
GIT and Endoscopes,
Faculty of Medicine
Menoufiya University

A Mins

#### Porf. Dr. Abd El-Aziz Abass Talab

Professor of General Surgery , Faculty of Medicine, Menoufiya University. Porf. Dr. Samir Mohamed Kohla

Professor of General Surgery ,
Faculty of Medicine,
Menoufiya University.

#### Porf. Dr. Awatef El-Said Farghally

Professor of General Surgery,
Faculty of Medicine,
Menoufiya University

Porf. Dr. Alaa Abd – Elah Frag

Professor of General Surgery ,

Faculty of Medicine,

Ein Shams University.

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# INTRODUCTION

#### INTRODUCTION

Worldwide the incidence rates of colon cancer are relatively higher than that reported among Egyptian population, this may be explained by the higher incidence of pre-cancerous predisposing factors among non-Egyptian populations (Wittich et al., 1997).

The early detection of colonic cancer is associated with a dramatic improvement in prognosis. This can be achieved now by adopting routine air contrast barium enema and colonoscopy for any suspicious cases (Gibson et al., 2000).

Most authors agree that the most important independent factor for survival or recurrence after potentially curative surgery is the stage of cancer which is determined by the depth of penetration through the bowel wall and the presence and the number of positive lymph nodes (Leung et al., 1999).

Surgical treatment of colon cancer requires excision of an adequate amount of normal colon proximal and distal to the tumor, of adequate lateral margins if the tumor is adherent to a contiguous structure and of the regional lymph nodes. Removal of intermediate and central lymph nodes requires ligation and division of multiple main vascular trunks. Therefore, the extent of the colon resection for potentially curable cancer is determined by the biology of local tumorous growth and by associated lymphadenectomy (Darzi et al., 1995).

Since 1987 when the French surgeon Philippe Mouret performed the first laparoscopic cholecystectomy (Puente et al., 1994), great advances in the field of laparoscopic surgery have been achieved (Scoggin et al., 1993). As surgeons have gained increasing skill and experience in laparoscopic procedures, the indications for this minimally invasive form of surgery have been expanded (Zucker et al., 1994). Laparoscopic cholecystectomy is the gold standard of treatment for patients with symptomatic gallstones. Laparoscopic techniques have been evaluated for other operations, including appendectomy, inguinal hernia repair, fundoplication and various colorectal procedures (Soper et al., 1994).

One of the most recent applications in this field is the use of laparoscopic techniques in colonic surgery (Bouvy et al., 1996). Fine and colleagues (1995) reported their experience in laparoscopic colectomy for patients with localized carcinoma of the colon.

Falk and colleagues (1993) published a case of laparoscopic removal of a large colonic lipoma. Feliciotti and colleagues (1996) reported their preliminary experience with laparoscopic guided colectomy for both benign and malignant colonic diseases.

Retrospective and prospective studies have not proved unequivocally that the laparoscopic technique is superior to open operation in all patients with colorectal disease. Particularly in patients with malignant disease, controversy exists with regard to whether the laparoscopic method may even be more harmful to the patient than conventional surgery, because of a possible increase in the incidence of

local and port-site recurrences [Christen et al., (1995) & Sazhin et al., (1995)].

Laparoscopic colorectal surgery requires very advanced laparoscopic surgical skills. Nevertheless, most series conclude that the laparoscopic technique is promising and may be used for benign colorectal disease, as most of the published studies have shown laparoscopy to be accompanied by fewer complications, shorter hospital stay, more rapid convalescence and less immunosuppression (Schiedeck et al., 2000).