

Retrospective Study Of Laparoscopy In Liver Neoplasm's

Thesis

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بسم الله الرحمن الرحيم

" قالوا سبحانك لا علم لنا إلا ما علمتنا إنك
أنت العليم الحكيم "

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Dedication

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ABSTRACT

Laparoscopy may detect multifocal or satellite tumors and peritoneal metastasis not detected by other radiological investigations as ultrasound and CT scan so it can decrease the incidence of unnecessary or non therapeutic laparotomy for malignancy in many patients.

Laparoscopic surgery of the liver must be performed cautiously, and only by surgeons with extensive experience in both hepatobiliary and laparoscopic surgery. In this study, we outline the indications; evaluate the feasibility and the degree of safety of laparoscopy as diagnostic and therapeutic in liver tumors.

Key words: Laparoscope, Diagnostic, Therapeutic, Liver tumors

LIST OF ABBREVIATIONS

<i>FNH</i>	<i>Focal nodular hyperplasia</i>
<i>HCC</i>	<i>Hepatocellular carcinoma</i>
<i>CC</i>	<i>Cholangiocarcinoma</i>
<i>LOH</i>	<i>Loss of heterozygosity</i>
<i>CEA</i>	<i>Carcino-embryonic antigen</i>
<i>FAP</i>	<i>Familial adenomatous polyposis</i>
<i>ABC</i>	<i>Adenomatous polyposis coli</i>
<i>ALP</i>	<i>Alkaline phosphatase</i>
<i>AFP</i>	<i>Alpha fetoprotein</i>
<i>PIVK-II</i>	<i>Protein-induced by vitamin K absence or antagonist II</i>
<i>DCP</i>	<i>Des-γ-carboxy prothrombin</i>
<i>US</i>	<i>Ultrasound</i>
<i>USG</i>	<i>Ultrasonography</i>
<i>CT</i>	<i>Computerized tomography</i>
<i>MRI</i>	<i>Magnetic resonance imaging</i>
<i>PET</i>	<i>Positron emission tomography</i>
<i>¹⁸F-FDG</i>	<i>¹⁸-fluorine labeled 2-deoxy-2-dglucose</i>
<i>SOR</i>	<i>Segment oriented hepatic resection</i>
<i>PEI</i>	<i>Percutaneous ethanol injection</i>
<i>IVC</i>	<i>Inferior vena cava</i>
<i>UCSF</i>	<i>University of California at San Francisco.</i>
<i>UNOS</i>	<i>United Network for Organ Sharing</i>
<i>MELD</i>	<i>Model for End-Stage Liver Disease.</i>
<i>RFA</i>	<i>Radiofrequency ablation.</i>

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INTRODUCTION

Since the event of laparoscopic cholecystectomy (**Dubois et al. 1989**) , minimally invasive surgery has been applied to solid organs such as spleen , (**Gigot et al., 1996**) kidney , (**Clayman et al. 1991**) adrenal glands, **Gangner et al.1997**)and the liver (**Gugenheim et al.,1996**) .

The first liver resection was reported by Azagra in 1996; they performed a left lateral segmentectomy (**Azagra et al.1996**) .

An increasing number of publication has been reported concerning laparoscopic treatment of benign liver tumors by resection (**Cherqui et al.,2000**) or local ablation (**Curley et al.,2000**).

However, laparoscopic resection of liver malignancies remains controversial (**Cuschieri 1995**). Indeed, the usual benefits of minimally invasive therapy (e.g., cosmetic aspect, rapid recovery, short hospital stay) are more pronounced in treating malignancy and challenged by the paramount oncologic objective, which is the long-term disease-free survival.

In spite of technical advances, the sensitivity of conventional imaging techniques is inadequate to provide precise staging of malignant neoplasm's of the liver. Abdominal ultrasound and CT scan often fail to detect many lesions including superficial and capsular lesions , subcentimetric (less than 1cm) lesions,

satellites around the primary tumor , peritoneal nodules and intra peritoneal dissemination (**Thaler et al., 2005**).

Diagnostic laparoscopy and laparoscopic ultrasound should be used as an adjunct to preoperative imaging studies in the staging of patient with primary or metastatic hepatic neoplasm to determine both surgical and nonsurgical therapeutic strategies(**Angelica et al., 2002**).

The introduction of minimally invasive surgical techniques presents the potential to avoid unnecessary laparotomies and determine the extent of resection in patients with hepatic malignant neoplasm (**Berber et al., 2005**).

AIM OF WORK

The aim of this study is to evaluate the value of laparoscopic techniques in liver neoplasm's and how much it may make a difference in the management of liver neoplasm's.

PATIENT AND METHODS

Five cases of liver neoplasm's subjected to laparoscopic management will be analyzed and studied to evaluate the value of laparoscopic techniques in liver neoplasms.