

HATCH'S INNOVATIONS IN
GYNECOLOGIC
LAPAROSCOPIC
SURGERY

HATCH'S

妇科恶性肿瘤
腹腔镜手术
新进展

KENNETH D. HATCH 著
邹长坪 译



HATCH'S

妇科恶性肿瘤腹腔镜手术新进展

HATCH'S INNOVATIONS IN

GYNECOLOGIC LAPAROSCOPIC SURGERY

KENNETH D. HATCH 著

邹长坪 译



高等教育出版社
Higher Education Press

图书在版编目(CIP)数据

HATCH'S 妇科恶性肿瘤腹腔镜手术新进展 / (美)
海奇 (Hatch, K.D.) 著; 邹长坪译. —北京: 高等教育出版社, 2006.8

书名原文: HATCH'S Innovations in Gynecologic
Laparoscopic Surgery

ISBN 7-04-020010-4

I.H… II.①海… ②邹… III.癌—腹腔镜—妇
科外科手术 IV.R737.3

中国版本图书馆CIP数据核字(2006)第088924号

策划编辑	安 琪	责任编辑	安 琪	瞿德竑
书籍设计	刘晓翔	责任印制	朱学忠	

出版发行	高等教育出版社	购书热线	010-58581118
社 址	北京市西城区德外大街4号	免费咨询	800-810-0598
邮政编码	100011	网 址	http://www.hep.edu.cn
总 机	010-58581000		http://www.hep.com.cn
经 销	蓝色畅想图书发行有限公司	网上订购	http://www.landaco.com
印 刷	北京信达艺术印刷有限公司		http://www.landaco.com.cn
		畅想教育	http://www.widedu.com
开 本	787×1092 1/16	版 次	2006年8月第1版
印 张	8.75	印 次	2006年8月第1次印刷
字 数	120 000	定 价	80.00元

本书如有缺页、倒页、脱页等质量问题, 请到所购图书销售部门联系调换。

版权所有 侵权必究

物料号 20010-00

郑重声明 高等教育出版社依法对本书享有专有出版权。任何未经许可的复制、销售行为均违反《中华人民共和国著作权法》，其为人将承担相应的民事责任和行政责任，构成犯罪的，将被依法追究刑事责任。为了维护市场秩序，保护读者的合法权益，避免读者误用盗版书造成不良后果，我社将配合行政执法部门和司法机关对违法犯罪的单位和个人给予严厉打击。社会各界人士如发现上述侵权行为，希望及时举报，本社将奖励举报有功人员。

反盗版举报电话：(010) 58581897/58581896/
58581879

传 真：(010) 82086060

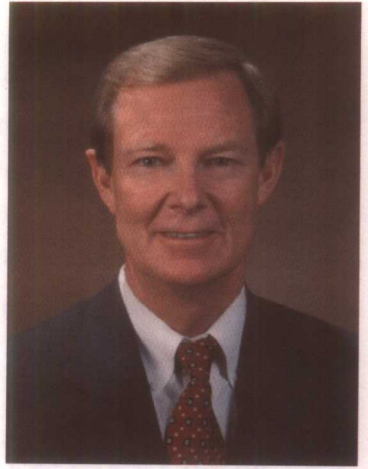
E - mail: dd@hep.com.cn

通信地址：北京市西城区德外大街 4 号

高等教育出版社打击盗版办公室

邮编：100011

购书请拨打电话：(010) 64014089 64054601
64054588



作者介绍

Hatch 教授，现任亚利桑那大学妇科肿瘤教授，曾任美国妇科肿瘤协会（Society of Gynecologic Oncology）主席，并为盆腔外科医师协会（Society of Pelvic Surgeons）副主席。Hatch 教授曾在外科、肿瘤妇科、阴道镜、宫颈病理等 30 几个国际及美国国内的协会、委员会任主席或主任。

Hatch 教授在专家评审期刊上发表学术文章 100 多篇，并在很多国际、国内学术会议上讲演。Hatch 教授在腹腔镜外科领域具有 14 年教学和实践经验，是目前腹腔镜外科界的国际知名专家，曾参与美国首次腹腔镜外科临床实验，培训过全美 250 名妇科肿瘤专业医师使用腹腔镜。Hatch 教授已完成了腹腔镜外科教科书的 3 部章节，并被全世界很多国家邀请行腹腔镜手术示范，是全美 CD 教学示范教授。

Introduction of Author

Dr. Kenneth Hatch is currently a professor in gynecology oncology at the University of Arizona. He was president of the Society of Gynecologic Oncology and is vice president of the Society of Pelvic Surgeons. He has served as president or director of more than 30 international or domestic professional association or committees in surgery, gynecologic oncology, colposcopy, and pathology of cervix.

Dr. Kenneth Hatch has published over 100 scientific articles in peer-reviewed journals and many book chapters. He has been invited to given lectures or seminars in many domestic and

international professional conferences. With 14 years of experiences in teaching and practicing in laparoscopic surgery, Dr. Hatch is an internationally renowned expert in laparoscopic surgery. He participated in the first trial on using laparoscopic surgery in gynecologic oncology. He was the author of the first randomized trial of laparoscopic surgery in the Gynecologic Oncology Group and had 250 gynecologic oncologists come to Arizona for basic training in the oncologic techniques. He has authored many papers and 3 chapters in texts on laparoscopic surgery. He is in demand throughout the world to demonstrate the surgery with video CDs and operate in their countries.

序 | Author's Words in Front

美国在 1974 年第一次开始妇科肿瘤的专业认证考试，并正式建立了妇科肿瘤学这一专业。而我正是在这一年进入了伯明翰的阿拉巴马大学开始专业训练，我选择了妇科肿瘤专业，因为我乐于接受外科的挑战，在这段专训时期，我学会了当时所有的常规手术。而有关妇科肿瘤专业的专科手术则包括子宫广泛切除术，广泛外阴切除术及盆腔脏器切除术。在妇科肿瘤专业完善地建立以后，子宫内膜癌及卵巢癌的治疗归入了妇科肿瘤专科。

在妇科肿瘤的知识不断更新的同时，手术也在不断进步。而且更多的重点是放在手术的技术上。在不影响肿瘤治疗的基础上，如何保留正常的组织结构成

In 1974 the specialty of gynecologic oncology was officially recognized in the United States and the first certification examinations were held. This was the year that I entered the training program at the University of Alabama in Birmingham Alabama. I chose the specialty of gynecologic oncology because I enjoyed the surgical challenges. During the training program I learned to perform the operations that were standard for the time. The operations that were unique to the specialty were the radical hysterectomy, radical vulvectomy and pelvic exenteration. After the specialty was well established the management of endometrial cancer and ovarian cancer became the responsibility of the gynecologic oncologist.

As the knowledge about gynecologic cancers grew the operations began to evolve. There was more emphasis on techniques that would preserve normal structures without compromising the chance for cure.

For radical hysterectomy it meant preserving the

了手术技术的重点。对子宫广泛切除术来说,这意味着要保护支配膀胱的神经,这样排尿的功能才可以复原。盆腔脏器切除术后
的再造术包括尿路分流再造和直肠肛门吻合术,从而使患者可以不用带口袋,而且可以用肌皮瓣做再造阴道。广泛外阴切除术减小了切除面积,而淋巴结的切除主要是切除前哨淋巴结,从而预防淋巴水肿。

为实现降低肿瘤死亡率的目标,治疗已发展到使用腹腔镜技术及其他
的微创外科手术时代。美国妇科肿瘤协会在1992年开始实行了两个新的临床实验来研究用腹腔镜进行子宫内膜癌和宫颈癌的淋巴结切除术是否可行,结果是成功的。随后又进行了随机分组的临床试验来比较子宫内膜癌腹腔镜手术和开腹手术技术的效果。而这个临床试验证实了腹腔镜手术与开腹手术效果一样,并且在减轻疼痛、失血和缩短住院时间以及恢复正常功能上优于开腹手术。我是上述几个临床试验的项目负责人及文章的报道作者。

由于腹腔镜对于妇科肿瘤医师来说还是一项新的技术,所以当时参加临床实验的妇科肿瘤

nerves that enervated the bladder so that urinary function was restored. Reconstruction after pelvic exenteration included continent urinary diversion and rectal anastomosis so the patients did not have to wear bags and neovaginas were made of myocutaneous flaps.

Radical vulvectomies became less radical and the node dissections centered on sentinel node removal that would prevent the lymphedema.

The goal of reducing morbidity from cancer treatment has now evolved into the era of minimally invasive surgery using laparoscopic techniques. In 1992 the Gynecologic Oncology Group in the United States opened two protocols that studied the adequacy of the surgery for endometrial and cervical cancer node dissections when done by laparoscopy. The trial was judged a success and a randomized trial began comparing the laparoscopic technique with open procedure for endometrial cancer. The trial has established laparoscopy as equal to open surgery with significant reduction in pain, blood loss, length of hospital stay, and return to normal activities. I was the author and the principal investigator for both the endometrial cancer pilot study and for the larger randomized trial.

Because laparoscopy was new to gynecologic oncologists the technique had to be taught to the surgeons who enrolled in the trials. As principal

外科医师需要学习腹腔镜的技术。作为项目负责人我担任了培训项目的主任。200多名妇科肿瘤医师来到亚利桑那州的图桑学习腹腔镜技术。就是从那时,我对腹腔镜教学产生了兴趣。我累积了很多腹腔镜的教学录像,而且花了很长时间在动物实验室和受训医师做动物模型的手术。当腹腔镜刚刚进入到这个领域时,只有少数的外科医师受过基本技能的培训。最早的课程强调的是腹腔镜的基本技能,因为难学,学生常放弃进一步学习。

今天几乎所有的医师都受过腹腔镜的基础训练,对他们来说,用腹腔镜技术来实行广泛的外科手术是他们的目标。对一位外科医师来说,理想的是先学会开腹手术的技术,然后再学习如何用腹腔镜技术进行相同的手术。

至今我已有14年的教学经验,教过不同水平的外科医师用腹腔镜进行各种外科的手术。这本外科手册是这些经验的结晶,不管受训对象的外科技能水平如何,书中包含的信息对每一个人都是适用的。本书用文字结合图像来描述和表现要掌握腹腔镜手术所必需的每一

investigator I became the training course director and over 200 gynecologic oncologists came to Tucson Arizona to learn laparoscopy. It was from this experience that my interest in teaching the techniques began. I accumulated many hours of teaching tapes and spent days in the animal laboratory operating on animal models with trainees. When laparoscopy was first introduced there were few surgeons trained in basic skills. The early courses emphasized basic laparoscopic techniques. Often the learning curve was too great and the trainee would not continue pursuit of the skills.

Today nearly all surgeons have had basic training in laparoscopy. The goal for them is to learn the radical surgical procedures by laparoscopic technique. Ideally one already knows how to do the operation by open techniques and then has to learn the techniques to accomplish the same operation with the laparoscopic tools.

I now have 14 years experience in teaching the radical surgical procedures to trainees at all levels of surgical experience. This surgical manual is a result of this experience. It contains information and instructions for everyone regardless of their skill level. It combines text and figures that describe and illustrate all of the steps necessary to learn and perform the procedures.

个步骤。

我愿本书能给读者带来完成
一个漂亮手术后的满足与喜悦。

My wish for the readers of this surgical manual
is that it brings them the satisfaction and joy that
accompanies a beautifully performed surgery.



Kenneth D Hatch

Hatch 医学博士

亚利桑那大学妇科教授

Kenneth D Hatch MD

Professor of Obstetrics and Gynecology

University of Arizona

目录 | Table of Content

001/	绪言 Introduction
003/ 1	应用腹腔镜手术治疗妇科肿瘤的进展 Development of Laparoscopic Surgery for Gynecologic Oncology
005/ 2	仪器及技术 Instruments and Technique
015/ 3	腹腔镜下盆腔及腹主动脉旁淋巴结切除术 Laparoscopic Pelvic and Paraaortic Lymphadenectomy
023/ 3.1	淋巴结切除术操作技术 Technique of Lymphadenectomy
035/ 4	子宫内膜癌 Endometrial Cancer
039/ 4.1	子宫内膜癌腹腔镜辅助下经阴道子宫切除术 (LAVH), 双侧卵巢输卵管切除术 (BSO) 及淋巴结切除术操作技术 Technique of Laparoscopic Assisted Vaginal Hysterectomy, Bilateral Salpingo-oophorectomy and Lymph Node Dissection for Endometrial Cancer
041/ 4.2	手术过程 Operative Approach
052/ 5	宫颈癌 Cervical Cancer

055/ 5.1	腹腔镜辅助下经阴道广泛性子宫切除术 (LARVH) 操作技术 Technique of Laparoscopic Assisted Radical Vaginal Hysterectomy
078/ 5.2	腹腔镜下广泛性子宫切除术 Laparoscopic Radical Hysterectomy
082/ 5.3	前哨淋巴结 Sentinel Nodes
083/ 5.4	经阴道广泛性宫颈切除术 Radical Vaginal Trachelectomy
096/ 6	卵巢癌 Ovarian Cancer
097/ 6.1	诊断可疑的附件肿物 Evaluation of the Suspicious Adnexal Mass
099/ 6.2	卵巢癌的探查 Staging of Ovarian Cancers
104/ 6.3	腹腔镜复查 Second-look Laparoscopy
109/ 7	并发症 Complications
110/ 7.1	电器械并发症 Electrosurgical Complications
112/ 7.2	血管并发症 Vascular Complications
113/ 7.3	胃肠道损伤 Gastrointestinal Injury
116/ 7.4	泌尿系损伤 Urologic Injury
117/ 7.5	切口疝 Incisional Hernia
119/ 8	总结 Summary

120/ 9	参考文献 References
125/	作者致谢语 Author's Acknowledgment
126/	译者致谢语 Acknowledgments from Translator

绪言 | Introduction

本书重点论述腹腔镜技术在妇科肿瘤外科手术的应用。这里的许多技术也可以适用于非恶性妇科病，例如子宫内膜异位症、良性的卵巢肿物、子宫内膜增生、宫颈不典型增生、月经过多。腹腔镜辅助的经阴道子宫全切术不但可以用于上述情况，也可用于其他需要切除卵巢、输卵管、子宫和宫颈的良性疾病。绝经妇女患阴道狭窄也可行腹腔镜子宫全切术。

This book is geared towards the laparoscopic techniques applicable to gynecologic oncology surgeries. However, many of these techniques are adaptable to benign conditions such as endometriosis, benign ovarian neoplasm, endometrial hyperplasia, cervical dysplasia and menorrhagia. Laparoscopic assisted vaginal hysterectomy can be done on women with these conditions as well as other benign conditions requiring removal of the ovaries, tubes, uterus, and cervix. In menopausal women who have a narrow vagina, complete laparoscopic hysterectomy can be performed.

1 | 应用腹腔镜手术治疗妇科肿瘤的进展

Development of Laparoscopic Surgery for Gynecologic Oncology

腹腔镜广泛应用于妇科已有40年历史。最初，只能由一名医师在单一的目镜下进行手术操作，故当时腹腔镜只能应用于简单的手术，如输卵管结扎术。现在的腹腔镜配置的摄像头，能将红、绿、蓝三元色信号处理后通过视频监视器显示，让参与手术的医师和护士均能看到。这样术者及助手们能看到手术的全景，从而可在腹腔镜下进行与开腹手术相似的复杂手术。开腹手术的原则同样适用于腹腔镜下手术：

1. 术野必须暴露清楚；
2. 确认解剖位置；
3. 拟切除的组织及器官必须在手术可操作的范围之内；
4. 术者必须具备足够的专业知识及技能。

Laparoscopy has been widely accepted in gynecology for 40 years. Initially it was performed by a single surgeon looking through a single eyepiece. This limited the surgery to simple operations such as tubal ligations. Laparoscopy is now performed with 3 chip cameras processing red, green and blue signals transmitted to video monitors that can be viewed by all of the operating and nursing team. It allows the surgeon as well as the assistants full view of the operation and thus the ability to perform extensive operations similar to open surgery. The principles of open surgery apply to laparoscopic surgery.

1. The operative field must be adequately exposed.
2. The anatomy must be identified.
3. The tissue to be removed must be accessible.
4. The surgeon must have the knowledge and skill to perform the operation.

近几年,电视腹腔镜迅速地应用于简单的妇科手术及操作,例如附件肿物切除术、经阴道子宫切除术、子宫内膜异位病灶清除及粘连分离等。由于未建立清除盆腔及腹主动脉旁淋巴结的技术,很长的时间内腹腔镜未能应用于妇科肿瘤的手术。

盆腔及腹主动脉旁淋巴结切除,无论是部分淋巴结切除(淋巴结活检)还是全部淋巴结的清扫,是妇科恶性肿瘤探查、分期及处理的关键步骤。

Video laparoscopy was rapidly adapted to simple gynecologic procedures such as adnexal mass removal, laparoscopically assisted vaginal hysterectomy, adhesiolysis and removal of endometriosis. It was not assimilated into gynecologic oncology because a technique for removal of pelvic and paraaortic lymph nodes did not exist.

The performance of a pelvic and paraaortic lymphadenectomy, either a partial lymphadenectomy (lymph node sampling) or complete lymphadenectomy, is the key procedure for the staging of gynecologic malignancies.