

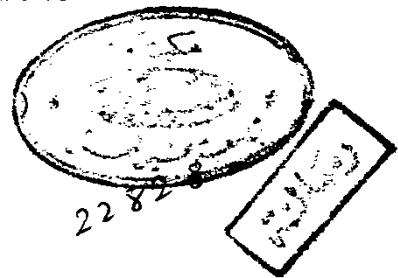
THE VALUE OF ENDOSCOPY IN GYNAECOLOGY & OBSTETRICS

Essay

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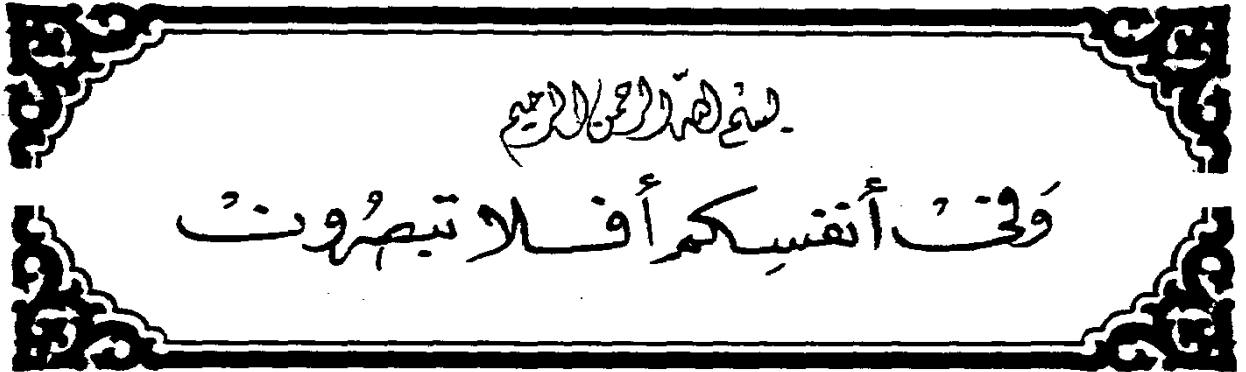
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Ab Arab scholar once said what could be translated as follows:

"I found that no one ever writes a book without saying the next day: if this part was changed, it would have been better, and if that was added it would have been better still, and if this part came before, it would have been nicer and if that was omitted, it would have been more beautiful. This is a great lesson and it shows how imperfect man is"

قال العماد الاصفهاني : " انى رأيت أنه لا يكتب انسان كتابا فى يومه الا قال فى غده : لو غير هذا لكان أحسن ، ولو زيد كذا لكان يستحسن ولو قدم كذا لكان أفضل ولو ترك هذا لكان أجمل وهذا من أعظم العبر وهو دليل على استيلاء النقص على جملة البشر " .

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This work is but the outcome of his deep interest and continuous encouragement. It would have been impossible to begin the study rather than to complete it without his generous help.

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Introduction and Aim of the work.

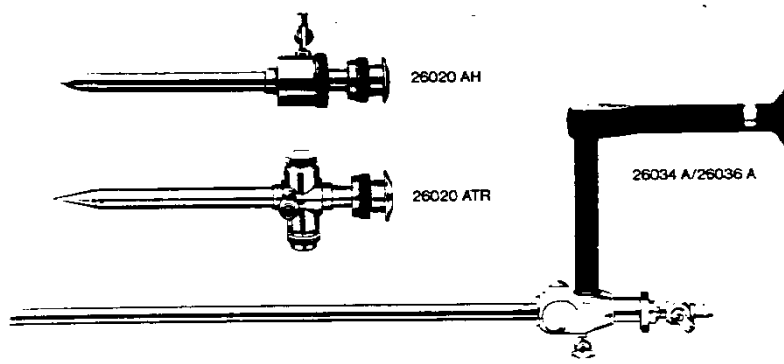
INTRODUCTION & THE AIM OF THE WORK

Endoscopic techniques have not only assumed a progressively strategic role but have also become indispensable to the practice of modern Obstetrics and Gynecology.

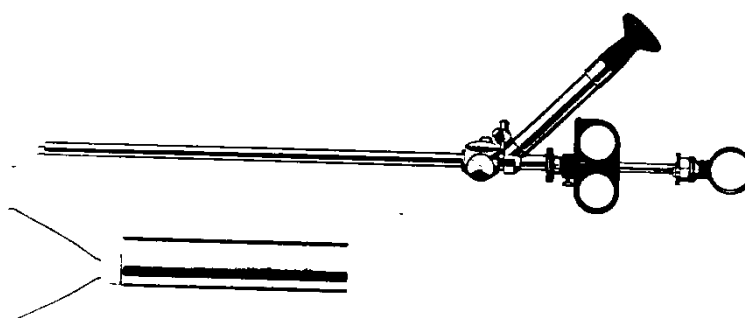
Interestingly no single medical group performs either the variety or the volume of endoscopic procedures undertaken by practitioners most anatomic structures as well as disease processes of the female reproductive tract conveniently lend themselves to this method of examinations.

Endoscopic methods are equally applicable for precise diagnosis and the performance of simple and complex surgery.

The aim of this thesis is to give a precise resume for Endoscopy in Obstetrics & Gynecology.



Single puncture operating laparoscopy
with trocar & cannula.



Operating laparoscopy with ring-applicator.

LAPAROSCOPE

LAPAROSCOPY

- * Introduction
- * History and Development
- * Instrument
- * Anaesthesia
- * Technique
- * Indications
- * Contraindications
- * Complications
- * Open laparoscopy

-1-

Introduction

Laparoscopy is endoscopic visualization of the peritoneal cavity through the anterior abdominal wall after establishment of pneumoperitoneum.

Direct pelvic visualization has become increasingly important in the evaluation of many gynaecological complaints and specially when diagnosis is obscure.

Frangenheim 1974, stated that "one eye in the pelvis is better than two fingers in the vagina".

Books and Marlow, 1977 stated that "the gynaecologist must has eyes at the end of his fingers so that he can delineate the size, shape and position of hte uterus and evaluate the adnexa".

Recent advances in equipments and techniques have made simplified the utilization of pelvic endoscopy in the modern practice of gynaecology. Numerous reported series have shown the usefulness and safety of the technique, and its indications are now well accepted.

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Laparoscopy has proved to be more superior to culdoscopy as it allows for a greater field of vision . It can be used safely in conditions when culdoscopy is contraindicated such as extensive adhesions in douglas pouch, pelvic endometriosis and bowel fixation (Fear, 1968 and Golditch, 1971).

When a new method like laparoscopy is so universally useful, It is essential to look to its safety and instructions on how to avoid complications (Singer, 1981). Safe laparoscopy depends on the proper training & experience of the operator, a surgical environment and a competent anaesthesiologist (Wheless, 1976).

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Historical Review of Endoscopy

The first recorded attempts to view the inner pelvic anatomy of living women by means of endoscopy were made in 1805 by Bozzini of Frankfurt . By using a reflecting mirror , candle and double-lumen urethral cannula. He was able to view the urinary bladder for stones and neoplasms. The success he achieved by using this primitive instruments stimulated other physicians to develop improved cystoscopes.

In 1853, Desormesux of Paris described his cystoscope that utilized a kerosene lamp , a concentrating mirror, and a genitourinary speculum. He later coined the term endoscopy in an article published in 1868 with Segelar. In the same year , Bruck a dentist from Breslau introduced electrical illumination to endoscopy. He inspected the oral chamber with a platinum loop heated with an electrical current. The greater illumination that this provided later proved to be essential for endoscopy of the abdominal cavity . Introduction of the use of electrical current for lighting the endoscope and later for electrosurgery resulted in its successful application in medicine and at the same time was responsible for some of its most serious complications.

-4-

In an attempt to prevent thermal injury during cystoscopy, Nitze of Berlin, 1879 circulated ice water within the bladder. His first instruments included prismatic lens systems, and he was able to take endoscopic photographs with the improved image he obtained. He introduced ureteral probes through channels within the cystoscope, which provided access for the performance of surgical procedures through the telescope.

Edison invented the incandescent lamp in 1880, and 3 years later Newman of Glasgow replaced the heated wire of the cystoscopy with a miniature version of the bulb. In 1887 Dittell placed the light at the distal tip of the cystoscope. This system of endoscopic illumination became the standard method of that period. The use of a glass rod to transmit light into the viewing chamber from an external light source was described in 1899 by Smith. In the same year similar use of a fused quartz rod was described by Thompson. However, these significant advances were not widely appreciated until 40-50 years later.

The successful use of the cystoscope to evaluate lower genitourinary disease prompted utilization of these instruments to view other areas of the inner abdominal chamber and pelvic anatomy. In 1901, Ott of Petrograd