

Mona maghraby



# بسم الله الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني



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# جامعة عين شمس

التوثيق الإلكتروني والميكرو فيلم

قسم

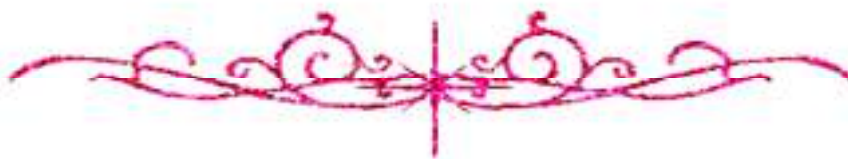
نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
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بعض الوثائق الأصلية تالفة  
وبالرسالة صفحات لم ترد بالأصل





B1A-21

# **THE USE OF LAPAROSCOPY IN FEMALE UROLOGY**

**Thesis**

**Submitted to the Faculty of Medicine  
University of Alexandria  
In partial fulfillment of the requirements  
of the degree of**

**Doctor of Urology**

**By**

**Mohamed El-Sayed Aly Hassouna**

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## **SUPERVISORS**

**Prof. Dr. Gamal M. Ghoniem**

Professor of Urology & Gynecology  
Tulane University School of Medicine  
New Orleans, Louisiana

**Prof. Dr. Salah E. Gaafar**

Professor of Urology  
Faculty of Medicine  
University of Alexandria

**Prof. Dr. Salah El-Salmy**

Professor of Urology  
Faculty of Medicine  
University of Alexandria

## **CO-WORKERS**

**Dr. Alaa E. M. El-Rifai**

Ass. Prof. of Urology  
Faculty of Medicine  
University of Alexandria

**Dr. Mohamed Shafik Anwar**

Lecturer of Urology  
Faculty of Medicine  
University of Alexandria

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# INTRODUCTION





## Female Urology

The term female urology or urogynecology have come to represent the field of special interest which deals with the interrelationship of the bladder, the urethra, and the rest of the female pelvic floor. A sound anatomic understanding of the interrelated structures of the female pelvis is required to any surgeon who is interested in urogynecology. The surgeon who operates for the correction of stress urinary incontinence may be asked to deal with complex problems in patients who have coexisting forms of pelvic relaxation, or who have had previous pelvic or vaginal surgery that affected the mechanism of continence.

Urogynecology requires a comprehensive understanding of the physiology of the lower urinary tract, and the mechanism of urinary continence. Differentiating between various types of incontinence and their causes is essential. Urodynamic techniques are also essential in the diagnosis of certain types of incontinence. The indications and the limitations of each of its testing should be well defined and understood by the urogynecologist, including uroflowmetry, cystometry, urethral pressure profile, electromyography, and complex urodynamic studies like videofluorourodynamic study.

Urogynecology deals with a wide range of lower urinary tract and genital organs pathologies. Among the most common disorders the urogynecologist faces are the pelvic floor prolapse and the stress urinary incontinence (SUI). Pelvic floor prolapse includes cystocele, rectocele, enterocele, and vaginal vault prolapse. Pelvic pain related to vesical and gynecologic causes is another problem, sometimes with ill defined causes. Vesico-

vaginal, urethro-vaginal, and uretero-vaginal fistulae require a thorough evaluation of both genital and urological systems. Finally, urethral diverticulae, cysts, and paraurethral abscesses are rarely faced in this subspeciality but require the experience of the urogynecologist for their reconstructive repair.

## ANATOMY OF PELVIC SUPPORT IN FEMALES

### **Pelvic floor**

The pelvic floor is a collection of tissues that spans the opening within the bony pelvis. It is at the bottom of the abdominopelvic cavity and forms a supporting layer for the abdominal and pelvic viscera. This a complex and multifaceted unit that includes all of the structures that lie between the pelvic peritoneum and the vulvar skin. The pelvic floor has three main supportive layers:

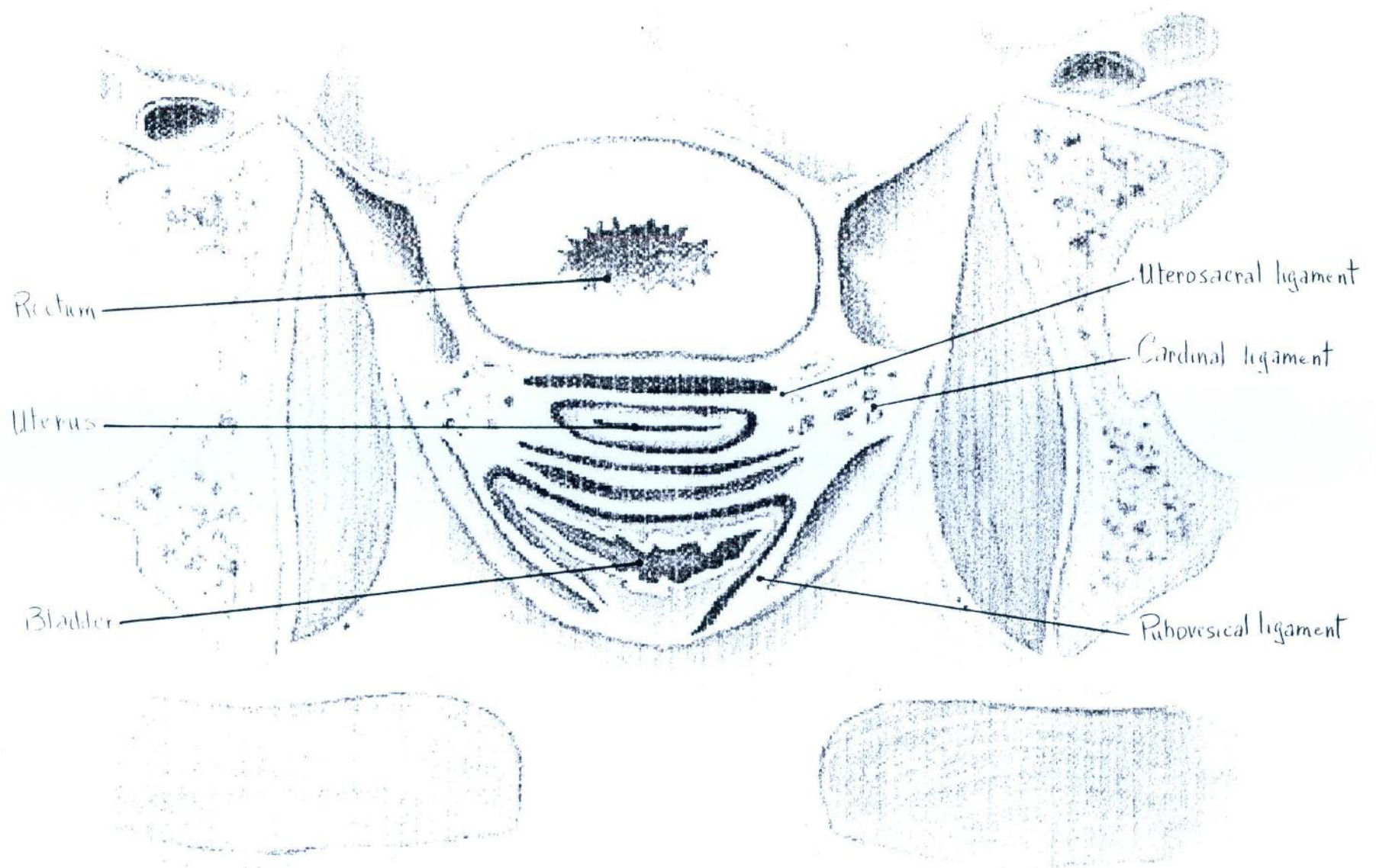
- 1- The endopelvic fascia
- 2- Levator ani muscles.
- 3- Perineal membrane

### **Endopelvic fascia**

The pelvic viscera are connected to the pelvic sidewalls by the endopelvic fascia, which is the direct continuation of the abdominal fascia (fig. 1). The pelvic fascia is anchored to the body of the pubis. A parietal layer covers the muscles that line the pelvis and forms its floor. The parietal fascia over the pelvic musculature is simply a continuation of the transversalis fascia. It is tough and very dense. Some of the pelvic viscera are surrounded by a visceral layer that forms a sheath for them. A specialized condensations of the fascia serve to form ligaments tethering the viscera to the pelvic wall. The obturator fascia is thicker than other parts of the parietal fascia.<sup>(1,2,3)</sup>

The fascia of the pelvic diaphragm covers both sides of levator ani. Fascia on the upper surface of the levator ani laterally follows the muscle's attachment, anteriorly from





**Figure 1: Schematic drawing of the ligaments surrounding and attaching the pelvic organs in females.**  
( From De Lancey, J.O.L., Anatomy of the female pelvis, Compact Disc)