

Chapter 3

INTRAPERITONEAL AND RETROPERITONEAL ANATOMY OF THE FEMALE PELVIS: SIGNIFICANT STRUCTURES AND RETROPERITONEAL SPACES

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INTRODUCTION

Proper knowledge of the female pelvic anatomy is crucial for performing safe and effective gynecologic surgery. The topographic anatomy of the female pelvis, including the bladder, uterus, fallopian tubes, ovaries, rectum, ligaments, and muscles has remained unchanged. However, knowledge of the dissection planes, vessels, potential spaces, and the pelvic nerves has been improved to enable the performance of advanced surgeries such as nerve-sparing endometriosis and cervix cancer.

In the past two decades, with advances in technology, laparoscopy became the advanced step of performing gynecologic procedures. Anatomy education was previously limited to cadaver dissection; however, laparoscopic recording systems have made training of young surgeons easy (Petscharnig and Schöffmann 2018). Laparoscopic magnification allows us to deeply explore anatomic features and demonstrate small and complex structures such as pelvic nerves and retroperitoneal spaces, and their relationships to each other (Possover et al. 2000).

In this chapter, the female pelvic anatomy is described from the laparoscopic aspect. The pelvic reproductive organs and retroperitoneal spaces are reviewed with an emphasis on clinical importance.

INTERNAL GENITALIA AND THEIR SUPPORT STRUCTURES

The internal genital organs are located in the true pelvis, including the vagina, uterus, cervix, uterine fallopian tubes, and ovaries. The ligaments of the female reproductive tract are a series of structures that support the internal female genitalia in the pelvis. Identification of important surrounding anatomical structures are crucial to perform gynecologic surgery.

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