

## Pelvic Endometriosis in a Patient with Primary Amenorrhea

Tavasoli, Fatemeh (M.D.)<sup>1</sup>; Hafizi, Leili (M.D.)<sup>1\*</sup>; Aalami, Mahboobeh (B.Sc.)<sup>2</sup>

1. Department of Obstetrics and Gynecology, Faculty of Medicine, Mashad University of Medical Sciences, Mashad, Iran.

2. Department of Midwifery, Faculty of Nursing and Midwifery, Mashad University of Medical Sciences, Mashad, Iran.

### Abstract

**Introduction:** Endometriosis is a disease defined by extra-uterine extension of endometrial glands and stroma. It usually occurs in women of reproductive age and in dependent sites of the pelvis. Theoretically, it is believed that the ectopic implantation of endometrial tissue occurs following retrograde menstruation. However, as the disease has rarely been seen in men, prepubertal girls or in unusual sites of body, other theories like coelomic metaplasia have been suggested. However, the very low prevalence rates of such cases have prevented those theories of being fully accepted. This is a case report of pelvic endometriosis in a patient with primary amenorrhea, presented as a proof for coelomic metaplasia or induction theory.

**Case Presentation:** A 19-year old virgin girl was referred to Imam Reza Hospital in Mashad with complaints of primary amenorrhea and an abdominal mass. She had not experienced menstrual bleeding upon receiving a combination of estrogen and progesterone. Her past medical history was not noticeable except for the operation she had underwent for intestinal tuberculosis 10 years earlier, which could explain the reason for her amenorrhea. She had a normal pattern of sexual hair growth, breast development and external genitalia on examination. She also had a large pelvic mass at the level of umbilicus, which had caused compression of both ureters as demonstrated by an intravenous pyelogram (IVP). During operation, a huge adhesive mass was observed at the right side of uterus, which could not be differentiated from the right adnexal tissue and the uterus itself. The mass was excised and the normal outflow tract of the uterus was confirmed. The mass consisted of a chocolate-colored liquid that could suggest the diagnosis of endometrioma or an accessory uterine lobe with hematometra. "Endometrioma accompanied by fallopian tube" was reported upon pathological examination.

**Conclusion:** Endometriosis in a subject with primary amenorrhea and absence of outflow tract obstruction, can strongly suggest ways other than endometrial cell implantation. One of these causes could be coelomic metaplasia, as an example of induction theory.

**Key Words:** Amenorrhea, Coelomic metaplasia, Endometrioma, Endometriosis, Induction theory, Metaplasia, Pelvic mass.

\* **Corresponding Author:** Dr. Leili Hafizi, Department of Obstetrics and Gynecology, Imam Reza Hospital, Faculty of Medicine, Mashad University of Medical Sciences, Mashad, Iran.

**E-mail:** hafizi@mums.ac.ir

**Received:** Mar. 2, 2008; **Accepted:** May 9, 2009