Case Report

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Uterine Myoma Causing Uremia in a 15-Year-Old Girl

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Key Words

Myoma
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Abstract

Uterine myoma leading to uremia in young women below 16 years of age is an extremely rare condition. On reviewing the literature we have not been able to find any case similar to the one described below.

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Case Report

Our patient, a 15-year-old girl, was admitted to the Department of Obstetrics and Gynecology, Akademiska Hospital, Uppsala, as an emergency case after suffering from abdominal pain and fatigue for 2 days. Before being admitted to our clinic the girl had been in generally good health and had played soccer only 4 days earlier. She had menarche at the age of 13 and her menses had been regular during the last year. She had never taken any kind of hormone preparations. Examination revealed a lower abdominal solid symmetrical mass in the uterus which, in our assessment, was enlarged to the size of 18 weeks' gestation. The girl was virgo intacta. Her heartbeat and blood pressure were normal. No signs of edema could be seen. Pregnancy test in serum was negative. Routine blood laboratory results showed unexpectedly: B-SR 90 mm, B-hemoglobin 85 g/l, sodium 136 mmol/l, potassium 6.9 mmol/l, creatinine 1031 μ mol/l. The girl was transferred from the emergency to the intensive care unit. Tests were immediately taken and when repeated after 1 h the potassium and creatinine levels had increased to 7.3 mmol/l and 1058 μ mol/l respectively. Urea in serum was 36 mmol/l. No urine was produced. Ultrasonography of the pelvis showed a homogenous and echogenous tumor measuring 20 $\times$ 12 cm probably emanating from the posterior wall of the uterus. The kidneys showed bilateral hydronephrosis. Resonium therapy was initiated and bilateral nephropylotomies were established under ultrasonic guidance. Contrast datortomography of the abdomen showed a 15 $\times$ 17 cm roundish tumor which could not be separated from the uterus. Signs of tumor dissemination were not seen. Two ultrasonically guided needle biopsies were taken from the tumor. Microscopic examination revealed leiomyomal tissue. Her serum levels of sex steroids were all within the normal range. A curettage of the uterus showed a cavity of normal size. At laparotomy the uterus was symmetrically enlarged and impacted in the pelvis (fig. 1). The myoma was tilted backwards with its most cranial part lying in Douglas. As a consequence the uterus had successively been drawn upwards during myomal growth and the stretched ligaments caused fixation of the uterus and the myoma in pelvis. The tumor could be removed entirely by a posterior transverse incision

(fig. 2). The operation was completed by suturing the posterior wall of the uterus and with that the pelvic anatomy was restored (fig. 3). Blood loss during surgery was minimal. Microscopic examination revealed benign leiomyoma. After the operation the nephropylotomies were withdrawn and the girl left hospital after 8 days. At a follow-up 6 months later her uterus had assumed normal size and her menstruations were regular. The creatinine/s level was, however, still somewhat elevated.

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Fig. 1. The uterus with the myoma.

Fig. 3. Final surgical result.

Fig. 2. The uterus and the myoma after myomal enucleation.

Comments

Previously only 2 cases of uteri myoma in girls under the age of 16 [1, 2] have been reported, although none of those reports described the dramatic process with decreased renal function as in our case. The extreme rarity of myoma in girls under 15 years of age is further confirmed by a review of 2,187 patients who underwent myomectomy and of whom none was below the age of 18 and only 8 were in the age group 18–20 [1].

References

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