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Decidual cast: A case report

Desidual cast: Bir olgu sunumu

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ABSTRACT

The decidual cast is endometrial tissue that spontaneously falls out from the vagina while endometrial cavity retains its original shape. Up to now 20 cases have been cited in the literature There were about 20 cases in the current literature in pediatric age group. Herein, we report a 13 year old girl presented with abdominal pain and vaginal bleeding, but normal physical examination and laboratory findings. Histeroscopy revealed a 4 cm sized nodular mass on the anterior uterine wall. Histopathological evaluation revealed atrophic endometrial glands within dense suppuration, necrosis and stromal decidualisation. The final pathologic diagnosis was decidual cast.
The decidual cast must be kept in mind in the differential diagnosis of intrauterine masses seen in children.

Key words: decidual cast, intrauterin mass, adolescent tumors

ÖZ

Desidual cast kavitenin orijinal şeklini koruyarak vajenden kendiliğinden dökülen endometrial doku parçasıdır. Literatürde bugüne kadar bildirilen 20 kadar olgu vardır.
Abdominal ağrı ve vajinal kanama yakınması bulunan 13 yaşında kız hastanın fizik muayene ve laboratuvar bulguları normaldir. Histeroskopide uterus ön duvarda 4 cm boyutta nodüler kitle saptanmıştır. Histopatolojik olarak yoğun süpürasyon içerisinde atrofik endometrial glandlar, nekroz ve stromada desidualizasyon gözlenmiştir. Olguya nihai olarak desidual cast tanısı verilmiştir.
Desidual cast çocuklarda görülen intrauterin kitlelerin ayırıcı tanısında akılda tutulmalıdır.

Anahtar kelimeler: decidual cast, intrauterin kitle, adölesan tümörler

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INTRODUCTION

Menstrual disorders with multifactorial etiologies affect 75% of adolescent females [1,2]. Menorrhagia is one of the most common menstrual disorders encountered in adolescent girls [3]. A decidual cast is the form of endometrial tissue which spontaneously falls out from the vagina, while the original shape of the endometrial cavity is retained [4]. Up to now 20 cases have been cited in the literature [4,5].

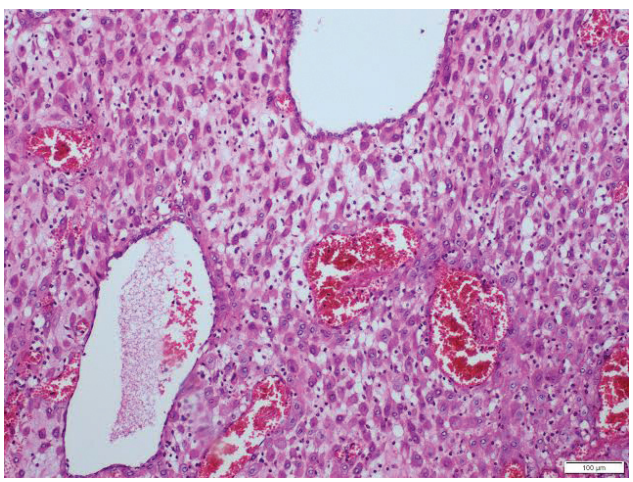
Here, we present this rare entity that must be remembered in the differential diagnosis of intrauterine masses in this age group.

CASE REPORT

A 13-year-old girl applied to our clinic with abdominal pain and dysfunctional uterine bleeding that started after her first menstrual period. She had no relevant medical history. She was receiving oral contraceptives for anormal uterine bleeding. Laboratory findings were normal with slight increase in CA125 (39.7 U/mL) and CA19.9 (69.3 U/mL) levels . MRI (magnetic resonance imaging) revealed a nodular mass with a size of 4 cm on the anterior wall of uterus. Endometrial thickness was 25 mm. PET (positron emission tomography) scan revealed an uterine mass as suspicious for malignancy. Uterine cavity

was then examined with an histeroscope and an irregular, soft, reticulated mass with irregular borders without marked vascularisation was detected in the cavity and the hymen was intact.

The small, fragmented tissues were sent to our laboratuary for frozen section. Frozen section result was concordant with decidual tissue. On the following day, solid, edematous tissue, spontaneously falled out from the vagina. It was 10x5x1.5 cm in size, with one side having a shiny appearance and areas of hemorrhage. Microscopically, atrophic endometrial glands with dense suppurations, necrosis and marked stromal decidualization were seen. Decidual cells were pleomorphic and epithelioid with eosinophilic cytoplasm and vesicular nuclei and showed vimentin positivity (Figures 1a-b and 2). Endometrial glandular cells positively stained with cytokeratin. The final histological diagnosis was reported as decidual cast. The patient is now asymptomatic and disease free on the routine follow-up of 5 years.



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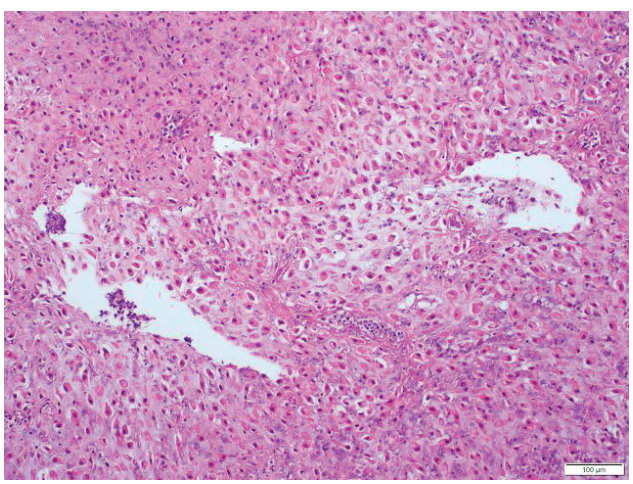

B

Figure 1a-b. Decidual cells were epithelioid with eosinophilic cytoplasm and vesicular nuclei (H&E, x100).

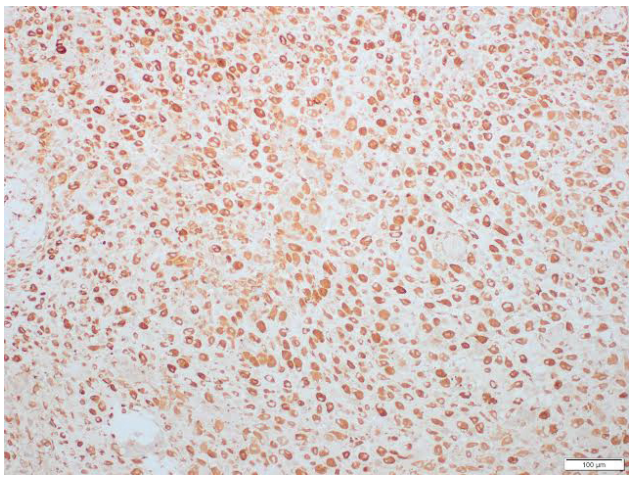

Figure 2. Immunohistochemical analysis of vimentin (x100).

DISCUSSION

Menstrual disorders are quite common among adolescents [3]. During the first 2 years, the menstrual cycle is often irregular. If menstrual cycle irregularities persist for 2 years after menarche, there can be a risk of adult menstrual irregularities and infertility [6]. The majority of bleeding disorders in adolescents likely reflect the exposure of the endometrium to estrogen and progesterone reflecting irregular or anovulatory menstrual cycles.

There are 21 cases reported in the literature with 2 (9.5%) cases with congenital abnormalities such as microcephaly, congenital deafness, delayed psychomotor and language development, and seizures controlled with clonazepam, and one other case with cerebral palsy, epilepsy, and mental retardation [7,8]. Congenital anomalies were not diagnosed in oıur case.

The differential diagnosis of decidual cast includes a variety of benign and malign lesions like fibroepithelial polyps, sarcoma botryoides, ectopic pregnancies in young patients who suffer from vaginal

bleeding, and uterine mass [4,7,9].

In summary, decidual cast is an entity that should be kept in mind by clinicians, radiologists and pathologists due to it's clinic or radiologic characteristics reminding various malignancies.

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