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Membranous Dysmenorrhea – Case Report

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Abstract

This is the report of a 32-year-old woman with severe abdominal pain followed by a decidual cast discharge. The Membranous Dysmenorrhea is a clinical entity rarely mentioned in the medical literature. Few discoveries have been madeabout this condition. The medical knowledge, due to the lack of description of this entity in current textbooks, also contributes to it's under diagnosis.

The anatomopathological exam defines the diagnosis. These case reports are important to help to define the ideal methods of treatment and recurrence of this gynecological disease.

Keywords

Dysmenorrhea, Membranous dysmenorrhea, Decidual cast

Abbreviation

DMPA: Depomedroxyprogesterone Acetate, MD: Membranous Dysmenorrhea, HCG: Human Chorionic Gonadotropin, COC: Combined Oral Contraceptive, WHO: World Health Organization

Introduction

Dysmenorrhea is painful menstrual cramps of uterine origin [1]. The Membranous Dysmenorrhea is a clinical entity rarely mentioned in the medical literature [2,3]. This term was first used in the 18th century by Giovanni Morgagni Bauttista [3-5] when he described a decidual cast or a spontaneous and painful sloughing of endometrium as an entire piece that retains the shape of the uterine cavity [2-8] or in several membranous pieces [6]. Few discoveries have been made since then.

Clinical Case

We present the case of a Caucasian 32-year-old woman who reported to the gynecologic emergency room, in a public hospital, due to severe abdominal pain followed by a decidual cast discharge (Figure 1). She had no history ofprior hospitalization. She referred a neurologic follow up because of her migraine without aura, for which she has been taking Topiramate.

Gravida 1, Para 1; reported her menses to be regular, usually 4-5 days, with heavy volume flow since menarche that occurred at age of 10. She was taking a combined oral contraceptive (COC) with Gestodene 75mcg and Ethinylestradiol 30mcg for dysmenorrhea and bleeding control.

Upon the third week of the fourth month of usage of the COC, she experienced severe abdominal cramps without relief despite the use of common analgesic lasting two days, followed by vaginal expulsion of a membranous elastic material similar to the uterine cavity and subsequent vaginal bleeding. She denied previous similar

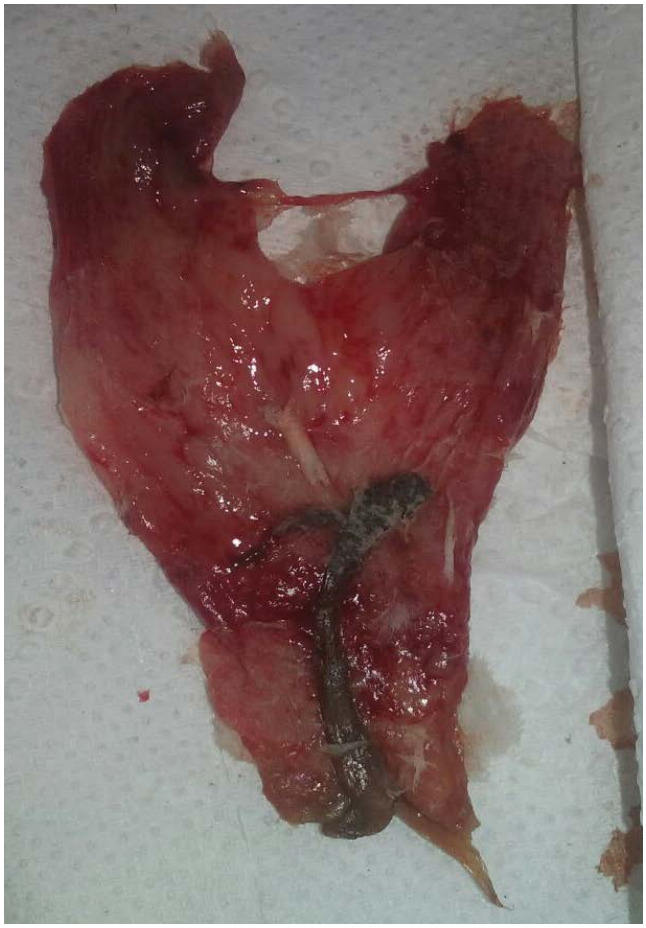

Figure 1: Decidual cast discharge

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episodes. Except for uterine bleeding, physical and bimanual pelvic examination revealed no anomalies. The transvaginal ultrasound was normal. Hemoglobin levels were 10.6g/dL and Quantitative Human Chorionic Gonadotropin (HCG) was negative. Histologic examination of the discharged material was consistent with decidual tissue.

Following this event, a contraceptive with isolated Desogestrel 75mcg replaced the previous COC, without complications.

Discussion

Although the etiology is unknown [2,3,5,9], the associated pain would start at detachment and endometrial passage without a dissolution within the cervix [4].

There are many theories regarding the pathophysiology of decidual casts [9,10]. Asch and Greenblatt [11] proposed that an increase in estrogen and progesterone production with incomplete disintegration of the endometrium results in a thickened endometrium that ultimately contracts to expel its contents [10]. Greenblatt et al. [12] have postulated an infections process [10]. Others have suggested the etiology is based in prostaglandin production [7,10]. Rabinerson et al. [7] suggested that integrins which mediate cell-cell adhesion events may play an important role in the development of membranous dysmenorrhea.

Reports demonstrate the occurrence of deciduous cast in women 9-41 years old, and all of them were using or just stopped using a hormonal contraceptive; however, decidual cast does not seem to be limited to a hormonal formulation or a route of administration [2]. In the case reported, the patient was taking COC with Gestodeno and Ethinyl estradiol. This formulation has been previously described in association of decidual cast [2,7], and other formulations as well such as Drospirenone [4], Ciproterone [4,11], Norgestimate [6,13,14], Desogestrel [9], Norethindrone acetate [10], transdermal patch [6], and injectable Depomedroxyprogesterone acetate – DMPA [6,7,15]. The recurrence rate also is not associated with continued use [2].

There are no data of its prevalence or incidence [2,4]. In most cases, there is only information transmitted by the patient without histological confirmation [2]. The medical knowledge, due to the lack of description of this entity in current textbooks, also contributes to its underdiagnosis [2].

There are few studies identified in the literature and that is why theses case reports are considered important for our understanding its symptoms, predisposing factors, and pathophysiology. The clinical relevance is associated with pain and genital bleeding, as well as the need to make the differential diagnosis with other gynecological disorders [2].

The vaginal passage of tissue in a woman of reproductive age raises several differential diagnoses. These are pregnancy, aborted pregnancy, rhabdomyosarcoma, polyp, and finally decidual cast [2,9,15].

The anatomopathological exam defines the diagnosis; a reaction of deciduous stroma, in the absence of another type of cell line, combined, in most cases, to their macroscopic features gives the final diagnosis establishment [2].

Accordingly is understood that some recommendations like progesterone in high doses, discontinuance of ovulation, androgen therapy, curettage, antibiotics, and vasoconstrictor (such as ergotamine), are controversial treatments and lack scientific evidence [2-4]. In this case we chose forthe observation of the patient, and the contraceptive method was changed for desogestrel 75mg, meeting the World Health Organization (WHO) medical eligibility criteria for contraceptive use.

The membranous dysmenorrhea has a good prognosis, a low rate of recurrence and does not seem to be associated with negative consequences in a long-term. Every woman should obtain detailed information about the possible side effects of hormonal therapies including nausea, vomiting, spotting, breakthrough bleeding, and even endometrial cast discharge.

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