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Case Report

A Rare Case Report of Decidual Cast

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I N F O

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A B S T R A C T

Objective: This study evaluated the characteristic of vaginal mass/ massive clot like structure by histopathology correlation.

Introduction: Decidual cast describes the spontaneous sloughing of endometrium as an entire piece while retaining the shape of Membranous dysmenorrhea presents as severe cramping pain due to the passage of this intact endometrial cast through an undilated cervix.

Materials and Method: This was a single case study done at outpatient department in Saraswathi institute of medical sciences and hospital. 49 years old presented with long history of excessive menorrhagia and dysmenorrhea with passage of thick clot like material. Endometrial biopsy was performed and correlated with Histopathology findings.

Conclusion: 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. Histopathology plays major role in diagnosis and differnciating with various diseases.

Keywords: Vaginal Mass, Massive Blood Clots, Thickened Endometrium, Decidual, Histopathology

Introduction

Decidual cast describes the spontaneous sloughing of endometrium as an entire piece while retaining the shape of the uterine cavity.[1]

Membranous dysmenorrhea presents as severe cramping pain due to the passage of this intact endometrial cast through an undilated cervix. It causes thickening and decidualisation of endometrium which may be expelled in the form of decidual cast.

Spontaneous expulsion of a fleshy mass per vaginumin a peri-menopausal woman is an uncommon event.[2]

It may be associated with ectopic pregnancy, incomplete abortion, non-pregnant state with use of progesterone, DMPA, rarely with oral contraceptive pills.Our case report is based on expulsion of decidual cast in pre-menopausal women with long history of excessive menorrhagia and dysmenorrhea with passage of thick clot for six months.

Case Report

This was a single case study done at outpatient department in Saraswathi institute of medical sciences and hospital.

A 49 years old multiparous women presented with long history of excessive menorrhagia and dysmenorrhea with passage of thick clot like material since 6 months.

Her menstrual cycles were regular with duration of 30 days. She was a multiparous women with previous normal vaginal deliveries. There was no histoy of any drug intake.

On examination, her blood pressure was normal 120/70 mmHg and pulse rate of 90 beats per minute. Abdomen examination was un-eventful.

On per-speculum - clots were seen, which was gently

removed and specimen send for pathology. Her UPT was negative. Serum Beta hCG was within normal limit. Pelvis ultrasound reveals normal sized uterus with thickened endometrium. Thickened endometrium in peri-menopausal women raised the possibilities of other diseases too. Therefore biopsy was performed by professional gynecologist and sended for histopathological correlation.

On Gross examination, a greyish white piece of tissue (uterine cavity shaped) measuring 4 x 3.5 x 3.5 cm was received, on cutting this tissue showed irregular hemorrhagic area. Histopathological examination was then processed and stained with H&E.

Microscopy sections showed pseudodecidualisation of the endometrial stroma, dilated, atrophic glands, some necrosis and fibrosis. No villi were seen. Thereby confirming the diagnosis of decidual cast.

Pre-menopausal aged female with heavy PV bleed and clots is considered one of the early markers of malignancy. However in our case, these findings are typical of decidual cast, which is rare in pre-menopausal age without any previous history of ectopic pregnancy and any pregnancy related complications.

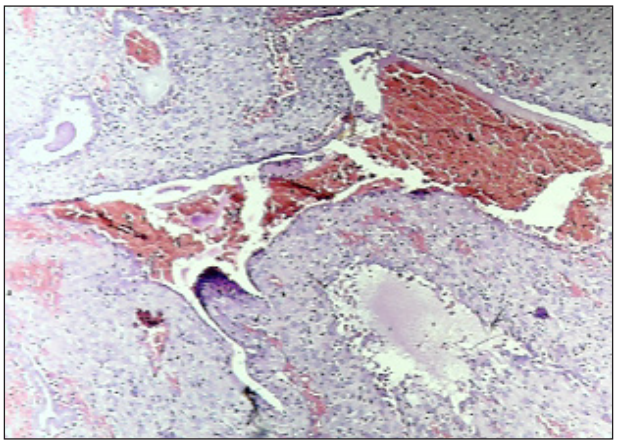

Figure1.10x H&E: Dilated Glands with Blood Vessels

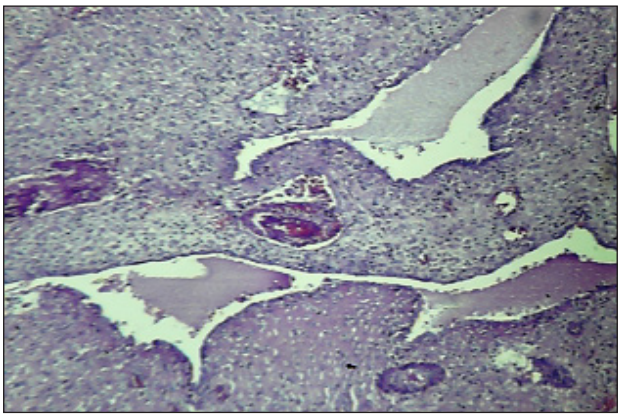

Figure 2.10x H&E: Atrophic Glands with Blood Vessels

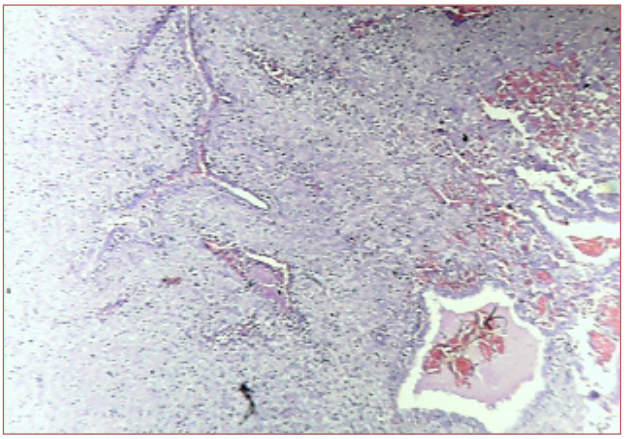

Figure 3.10X H&E: Dilated & Atrophic Glands

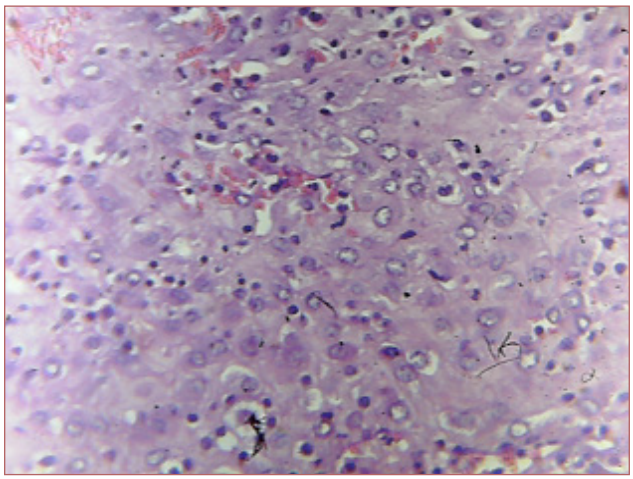

Figure 4.40x H&E: Pseudodecidualisation of the Endometrium

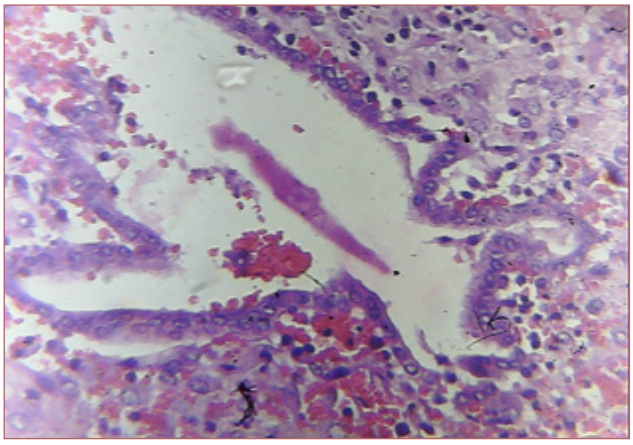

Figure 5.40x H&E: Pseudodecidualisation of the Endometrium

Discussion

Spontaneous expulsion of voluminous fleshy mass in a peri-menopausal woman is a frightening symptom for the woman. Differential diagnosis can range from an innocuous diagnosis of an abortion to uterine malignancy. [3] It is an un-common occurrence (passage of fleshy mass per vaginum)

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and managing gynecologists needs definitive advice from pathologists regarding the confirmation of diagnosis.[3]

The Membranous Dysmenorrhea is a clinical entity rarely mentioned in the medical literature.[4,5] This term was first used in the 18th century by Giovanni Morgagni Bauttista[4-7] 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.[1-7] Few discoveries have been made since then.

Nunes RD, Pissetti VC [8] showed in a case report of a 32-year-old woman with severe abdominal pain followed by a decidual cast discharge. She was taking a combined oral contraceptive (COC).

Similarly, Sharmila V, Thirunavukkarasu AB[9] reported a case of membranous dysmenorrhea in a 36 year old multiparous woman, who was not on any hormonal therapy. She presented with history of menorrhagia for 20 days and severe dysmenorrhea. Which was similar to our case.

Decidual cast formation in peri-menopausal women is a rare possibility, still it should be kept in the differential diagnosis of the fleshy mass expelled per vaginum.

The differential diagnosis of decidual cast includes a variety of benign and malignant lesions like. [1-9] Molar pregnancy, Past history of abortion, Ectopic pregnancies.

Fibroepithelial Polyps: Shows fibrocollagenous stroma with a cystic cavity lined by stratified squamous epithelium.[10]

Sarcoma Botryoides: Shows pleomorphic elongated spindle cells with some conspicious nucleoli with eosinophilic fibrillar cytoplasm. The spindle cells are separated from each other by collagen fibers, with an irregular fascicular growth pattern.

UPT or serum β-hCG easily rules out abortion or molar pregnancy. Our histo-pathological examination showed markedly decidualized stroma with attenuated endometrial glands (Figure 4, 5). No chorionic villi were seen in the specimen.

Conclusion

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. Histopathology plays major role in diagnosis and differentiating with various diseases.

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