Medical Sciences
ISSN: 1308 7312 (NWSAMS)
ID: 2018.13.4.1B0055

Status : Case Report
Received: May 2018
Accepted: October 2018

Asuman Kilitçi
Ahi Evran University, dr.asuk@gmail.com, Kırşehir-Turkey
Fahri Yılmaz
Sakarya University, fahriyilmaz@sakarya.edu.tr, Sakarya-Turkey
Ahmet Karataş
Abant İzzet Baysal University, akaratas1973@hotmail.com, Bolu-Turkey

DOI	http://dx.doi.org/10.12739/NWSA.2018.13.4.1B0055	
ORCID ID	0000-0002-5489-2222	-
	-	
CORRESPONDING AUTHOR	Asuman Kilitçi	

ECTOPIC DECIDUA IN THE ADIPOSE TISSUE OF THE ABDOMINAL WALL

ABSTRACT

Ectopic decidual transformation is an uncommon condition in the abdominal wall during laparotomy for a cesarean section for pregnancy. It occurs most often in the ovary, cervix, but also presents omentum, appendix and peritoneum. A case of ectopic decidua found in the anterior abdominal wall incidentally in a 30-year-old pregnant female is described. The lesion, 3cm in diameter that formed a nodule. Microscopic evaluation revealed decidualized cells which were large polygonal and eosinophilic, some with vacuolated cytoplasm. Pregnancy related ectopic deciduous develops with the effect of progesterone in pregnancy and it is a benign lesion. Although, its histological appearance is characteristic, differential diagnosis should be done carefully.

Keywords: Pregnancy, Ectopic, Decidua, Abdominal Wall, Histopathology

1. INTRODUCTION

Deciduosis (ectopic decidua) has been reported most often in the ovary, uterus, cervix and peritoneum with or without symptoms such as abdominal pain, intraperitoneal haemorrhage and abortion [1]. Ectopic decidua often occurs in association with pregnancy [2 and 4]. Physiogically, decidua consists of stroma cells of the endometrium transformed during pregnancy under the influence of ovarian, placental hormones especially progesterone. Ectopic decidual transformation or extrauterine development of decidual reaction was first described by Walker in 1887 [5]. Abdominal wall deciduosis often develop in previous obstetrical or gynecological procedures such as cesarean delivery, hysterotomy, hysterectomy and tubal ligation. Its clinical diagnosis can be confused with abscess, lipoma, hematoma, suture granuloma, hernia, desmoid tumor, sarcoma, lymphoma and primary/metastatic cancer.

2. RESEARCH SIGNIFICANCE

Ectopic decidua is a benign lesion that occurs during pregnancy and results in the decidualization of the endometrial tissue implanted during the previous gynecological intervention with the effect of progesterone. Although the histological appearance is characteristic, the differential diagnosis should be done carefully and correlated clinically.

How to Cite:
Kilitçi, A., Yılmaz, F., and Karataş, A., (2018). Ectopic Decidua in The Adipose Tissue of The Abdominal Wall, **Medical Sciences (NWSAMS)**, 13(4):91-94, DOI: 10.12739/NWSA.2018.13.4.1B0055.

3. CASE REPORT

A 30-year-old female (gravida 3, para 2) at 38/3 weeks' gestation without complications was admitted for repeat cesarean section. At the operation, a firm painless 3X2X1 cm mass was realized in the lower anterior abdominal wall. It was localized in fatty tissue. Continuity between the mass and the previous cesarean section scar wasn't apparent. Both ovaries were confirmed to have no particular changes. Excision of the mass was done. In macroscopic examination, the mass was whitish in color. It was surrounded by a thin membrane and fat tissue. Cut surface of the lesion showed a cobblestone appearance. The resected tissue sample was fixed in 10% buffered formalin and embedded in paraffin. Sections (5 mikrons thick) were taken and stained with hematoxylin-eosin to evaluate the sections with light microscopy. Histopathologically, the samples were composed of large polygonal and eosinophilic cytoplasm, resembling endometrial decidual cells. The biopsy lesion was surrounded with adipose and a thin fibromuscular tissue (Figure 1 and Figure 3). Decidual stroma contained mild chronic inflammation and congested vessels (Figure 2). The histological examination suggested an ectopic decidual reaction.

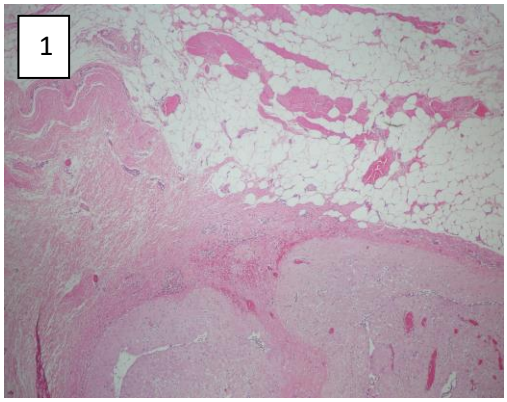

Figure 1. H&E, x40

Figure 2. H&E, x40

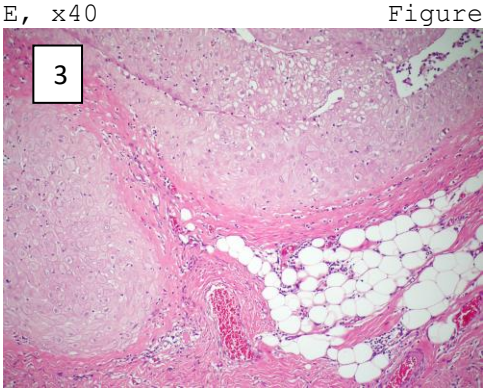

Figure 3. H&E, x100

4. DISCUSSION

Ectopic decidua is most commonly seen in the ovary, cervix and uterine serosa while the abdominal wall localization is rare [6 and 9]. Most of the patients are related to normal pregnancy [2 and 4]. Ectopic decidua is found incidentally in biopsies obtained during a cesarean section (C/S), elective tubal ligation and appendectomy. But some cases have been reported with abdominal pain and intraperitoneal haemorrhage. Our case had no clinical symptom and the decidual tissue was seen incidentally during the C/S operation. The macroscopic appearance of the lesion changes case to case. It may be nodular or

polypoid appearance [3, 4 and 10]. A soliter, nontendered nodule was detected in adipose tissue in our case. Microscopically, according to the reports, decidualization in abdominal wall layers can be located under the mesothelium, in the subcoelomic mesenchyme, fatty and cutaneous tissue [2, 11 and 12]. As in our case, the decidual cells forming cell groups were in subcutaneous fatty and muscle tissue. The time of the first occurance up to involution of the extra-uterine decidua postpartum is not yet completely understood [13]. Zaystev et al. put forward two related theories [3]. The most commonly accepted theory is the possibility of hormonally induced metaplastic changes in the subcoelomic pluripotent mesenchyme. Another theory is previous endometric deposits of the peritoneum. Endometriotic foci undergo prominent stromal decidualization with the impression of progesterone during pregnancy and this appears ectopic decidua. Endometriotic foci may be result of transportation of endometrial tissue during surgical procedures (especially C/S) and subsequently stimulated by estragen to produce endometriomas.

Clinicopathologically, it is required to differentiate deciduosis from decidualized endometriosis. Clinical symptoms of the menstrual period, endometriosis foci in other areas are significant clues of endometriosis [3 and 4]. Our patient didn't have associated symptoms. Preoperative diagnosis is difficult to make and sometimes the diagnosis is made after excision only, as in our case. It was diagnosed after excision histopathologically. Histologically,diffuse cell distribution of deciduosis tissue didn't found and there were no endometriosis foci (hemorrhagic foci, endometrial glands and/or stroma). For this reason, the case was interpreted as pregnancy-related ectopic decidua of the abdominal wall following C/S. The differantial diagnosis of abdominal wall deciduosis include metastatic carcinoma (particularly if decidual cells have a vacuolated cytoplasm mimicking signet ring cells), deciduoid mesothelioma and metastatic malign melanoma. The clinical history, no cell atypia, mitosis in decidual cells, any specific pattern of cell arrangement assists in making diagnosis of deciduosis.

5. CONCLUSION

As a result, asymptomatic pregnancy related deciduosis is a benign lesion in the abdominal wall especially with a history of previous gynaecological or obstetrical surgery. This condition can be confused with other surgical conditions. If the clinician cannot make a preoperative diagnosis, histopathological examination of the lesion can clinch the final diagnosis. Patient should be followed up for recurrence. In cases of continual recurrence possibility of malignancy should be kept in mind.

NOTICE

Conflict of interest: We have no conflict of interest.

REFERENCES

1. Suster, S. and Moran, C., (1990). A. Deciduosis of the appendix. Am J Gastroenterol. 85(7):841-845.
2. Shukla, S., Pujani, M., and Singh, S.K., (2008). Ectopic Decidual Reaction Mimicking Peritoneal Tubercles: A Report of Three Cases. Indian J Pathol Microbiol. 51(4):519.
3. Zaytsev, P. and Taxy, J.B., (1987). Pregnancy-associated Ectopic Decidua. Am J Surg Pathol. 11(7):526-530.

4. Massi, D., Susini, T., Paglierani, M., Salvadori, A., and Giannini, A., (1995). Pregnancy-associated Ectopic Decidua. Acta Obstet Gynecol Scand. 74(7):568-571.
5. Von Solothurn, A.W., (1887). Der Bau der Eihäute bei Graviditas Abdominalis. Archiv für Pathologische Anatomie und Physiologie und für klinische Medicin. 107(1):72-99.
6. Israel, S.L., Rubenstone, A., and Meranze, D., (1954). The Ovary at term. I. Decidua-like Reaction and Surface Cell Proliferation. Obstet Gynecol. 3(4):399-407.
7. Ober, W.B., Grady, H.G., and Schoenbucher, A.K., (1957). Ectopic Ovarian Decidua without Pregnancy. Am J Pathol. 33(2):199.
8. Schneider, V. and Barnes, L.A., (1981). Ectopic Decidual Reaction of the Uterine Cervix: Frequency and Cytologic Presentation. Acta Cytol. 25(6):616-622.
9. Hofbauer, J., (1929). Decidual Formation on the Peritoneal Surface of the Gravid Uterus. Am J Obstet Gynecol. 17(5):603-612.
10. Büttner, A., Bässler, R., and Theele, C., (1993). Pregnancy-Associated Ectopic Decidua (deciduosis) of the Greater Omentum. An Analysis of 60 Biopsies with cases of Fibrosing Deciduosis and Leiomyomatosis Peritonealis Disseminata. Pathol Res Pract. 189(3):352-359.
11. Yoshimoto, M., Tsutsumi, M., Horie, K., Konishi, Y., and Tsuneyoshi, M., (1998). Ectopic Decidua Found as a Subcutaneous Mass in the Lower Anterior Abdominal Wall of a Pregnant Woman. J Nara Med Ass. 49:489-492.
12. Fair, P.K., Patterson, W.J, Murphy, R., and Rudd, J.R., (2000). Cutaneous Deciduosis. J Am Acad Dermatol. 43(1):102-107.
13. Lesafer, J., Feryn, T., and Proot, L., (2009). Pregnancy-Associated Ectopic Decidua of the Appendix. Acta Chir Belg. 109(1):93-94.