

Case Report

A case of decidualization of the appendix —Immunological analysis of its origin—

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Background : Decidualization was frequently discovered in many organs during pregnancy. Appendix was occasionally affected and found as acute abdomen. We experienced one case and its immunohistochemical study of decidualization of the appendix was reported.

Case : The patient was a 34-year-old pregnant woman, presented with signs and symptoms of acute appendicitis in 31-week of gestation. Appendectomy was performed and showed phlegmonous inflammation with perforation. The serosal side became markedly thickened with myxoid change. Histologically, the lesion was characterized by the presence of multiple, irregularly distributed sub-mesothelial deposits of decidualized cells. Immunohistochemically, the decidualized cells strongly stained by vimentin and WT 1, consistent with decidual stromal cells. The intercalated gland-like lesions were derived from not heterotopic endometriosis but mesothelial invagination or its inclusions immunohistochemically.

Conclusion : This tumor was consistent with decidualization of the appendix.

Key Words : decidualization of the appendix, acute abdomen, pregnancy-associated decidualization, immunohistochemistry, origin

Background

Several cases of ectopic decidualization during pregnancy were reported but its histogenesis remained in discussion⁽¹⁾. External endometriosis was most compatible and decidualized cell were derived from ectopic endometrial stromal cells.

In this time we experienced one case of decidualization of the appendix and reported our immunological analysis for its origin.

Case

A 34-year-old pregnant woman presented with signs and symptoms of acute appendicitis in 31-week of gestation. Appendectomy was performed and showed phlegmonous inflammation with perforation. The serosal side became markedly thickened with myxoid change, swollen in diameter up to 1.5 cm (Photo 1, 2),

Histological findings : Appendix and mesoappen-

dix revealed subserosal decidualization with gland-like configuration (Photo 3, 4). The gland-like lesions were immunologically examined if they were derived from endometrial glands. Immunological results were summarized (Table 1, Photo 5), which suggested that these glands revealed not endometrium but mesothelium of invagination or rests⁽²⁾. Decidual cells were positive for WT 1 and hormonal receptors as eutopic deciduas.

Conclusion

We studied the massive subserosal myxoid change immunologically. Pseudodecidualized cells were positive for WT 1 as eutopic decidual cells. Intercalated gland-like lesions were regarded as mesothelial origin rather than ectopic endometrial one with CD 15, WT 1, and calretinin as immunological mesothelial markers. Consequently decidualization of the appendix was derived from ectopic decidual reaction of eutopic appendiceal or mesoappendiceal stroma immunologically. This tumor was consistent with decidualization of the appendix.

Reference

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2. Ikarashi T et al. Immunohistochemical detection of p 53 in endometrial carcinoma for the prospect of lymphatic permeation and nodal metastasis participating in the prognosis. *Niigata-Ken Koseiren Med J* 1998 ; 8 : 28-31.

和文抄録

症 例 報 告

虫垂脱落膜症の1症例 —起源の免疫組織学的検討—
長岡中央総合病院、病理部；病理医
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背景 : 脱落膜症は、妊娠中に、様々な臓器に認められる。虫垂脱落膜症は稀に急性腹症として報告される。

症例 : 虫垂脱落膜症の1症例について経験したので、免疫組織学的検討を加え、その起源について検討した。症例は妊娠31週の34才妊婦で、急性化膿性虫垂炎による急性腹症として開腹され、穿

孔を伴う虫垂脱着膜症と診断された。免疫組織学的に、子宮内膜症の関与を認めることは出来なかった。

結論：特発性の虫垂脱着膜症の1症例について報告した。

キーワード：虫垂脱着膜症、急性腹症、妊娠関連性脱着膜症、免疫組織化学、起源

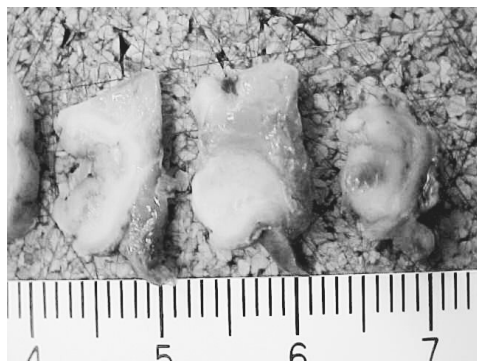


Photo 1 loupe

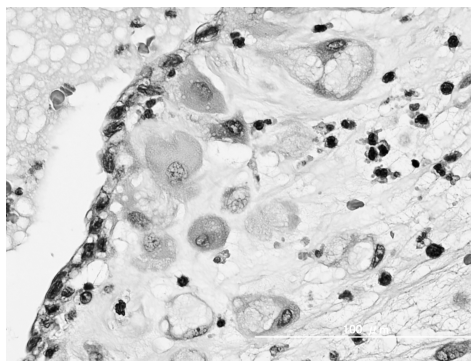


Photo 4 HE



Photo 2 loupe

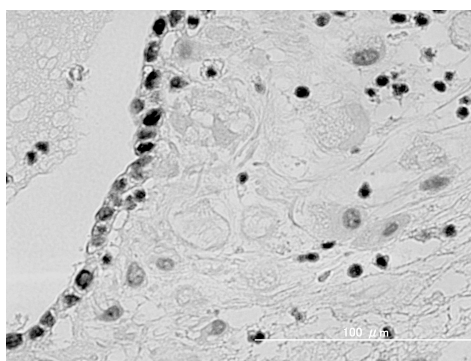


Photo 5 calretinin

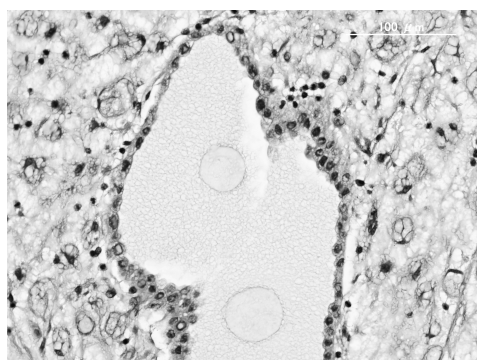


Photo 3 HE

Table 1 Immunostaining and mucous histochemistry

Reagent against	target cells	peritoneum	gland-like	decidual-like
CD15 (LeuM1)	Hodgkin, mesothelium	+	+	—
CD68	monocyte·M ϕ	—	—	—
vimentin	mesenchyme	—	—	++
desmin	muscle	—	—	—
HHF—35	muscle	—	—	—
α -SMA	muscle	—	—	—
CD34	endothelium·GIST	—	—	—
S100	nerve	—	—	—
AE—1, 3	epithelium	+	+	—
CAM5. 2	epithelium	+	+	—
Ber-EP4	epithelium	+	+	—
CEA	epithelium	—	—	—
D2—40	mesothelium	—	—	—
calretinin	mesothelium	+	+	—
WT1	mesothelium	+	+	+
c-kit	gastrointestinal stromal tumor	—	—	—
HPL	chorioepithelium-related	—	—	—
ER	estrogen receptor	+	+	+
PgR	progesterone receptor	+	+	+
AIB pH2. 5	mucin	+	+	+
AIB pH1. 0	mucin	+	+	+
PAS	mucin·glycogen	glycogen	glycogen	glycogen
mucicarmine	mucin	—	—	—

GIST : gastrointestinal stromal tumor