



Pregnancy-induced Vaginal Hemangioma: Case Report and Literature Review

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Objective

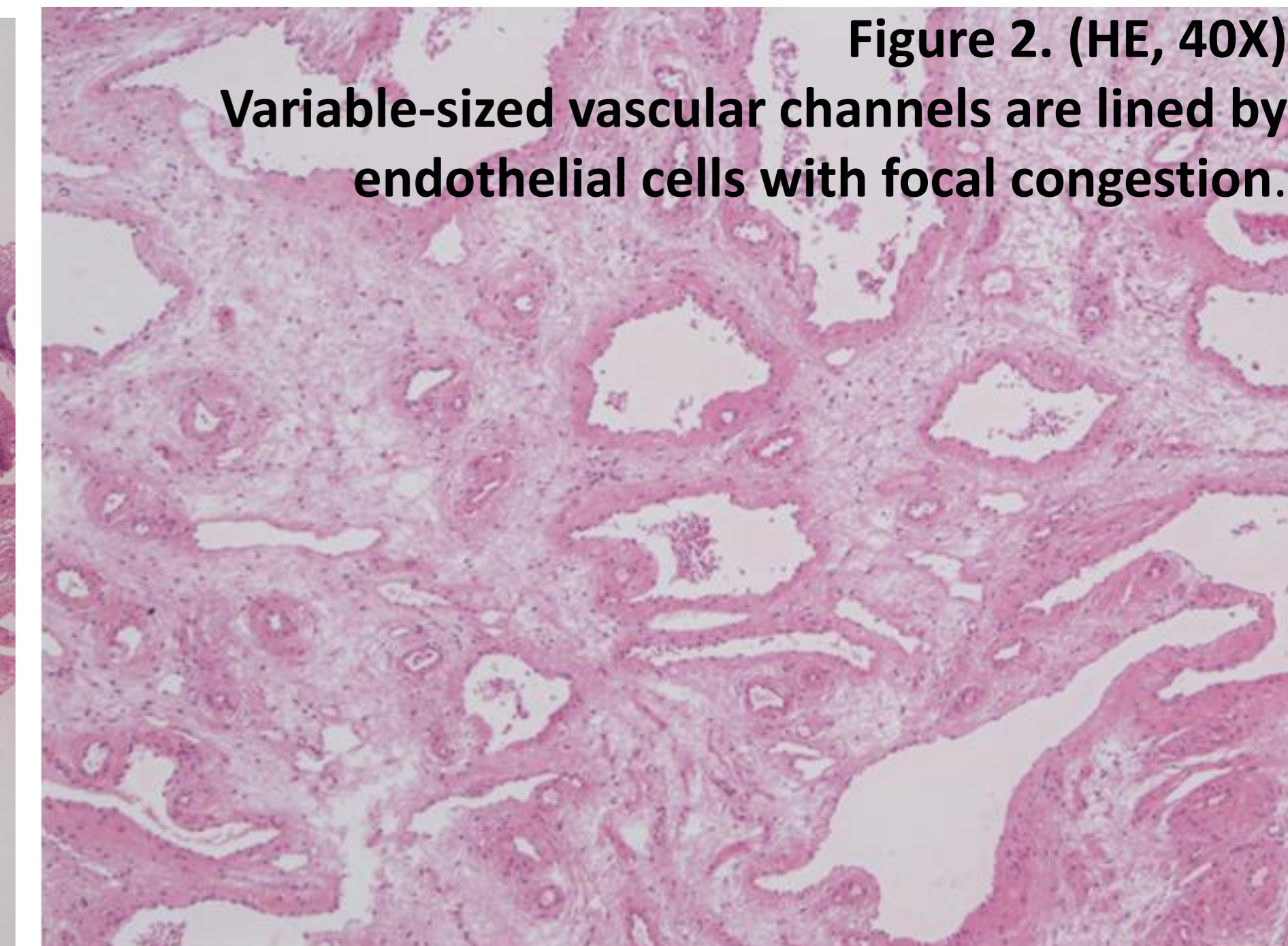
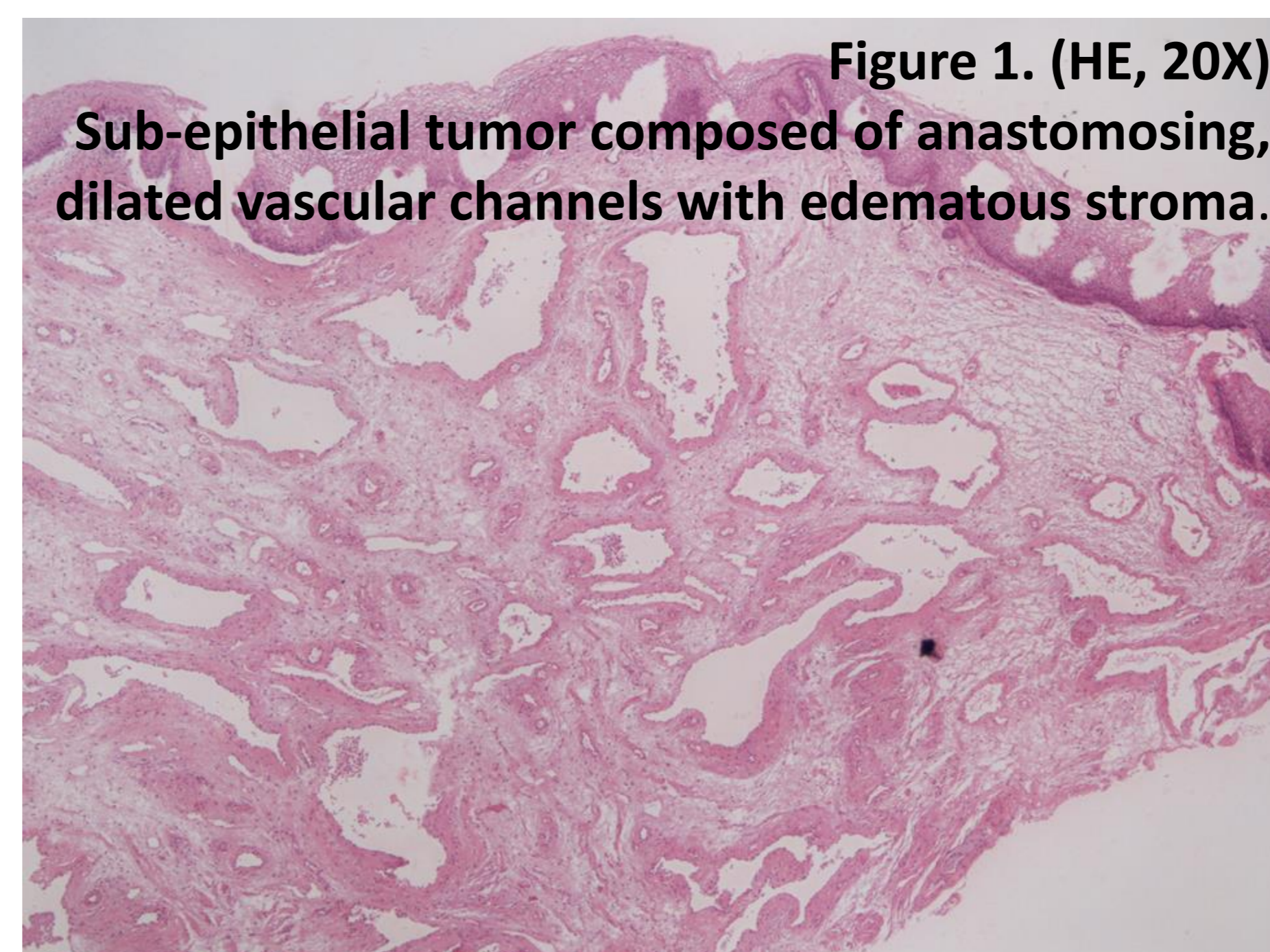
Pregnancy-induced vaginal hemangioma is rare and can complicate pregnancy. We report a case of a multiparous woman, who suffered from acquired vaginal hemangioma since second trimester. Its presentations, differential diagnoses, and managements will be discussed with support from related publications.

Method and Materials

Case report and literature review

Results

A 37-year-old woman, G2P1, without known underlying conditions suffered from foreign body sensation since gestational age 16 weeks. She had vaginal delivery for her first child, but otherwise denied history of vaginal trauma or operation. She started feeling a protruding mass at around 4-5 o'clock of her introits and it grew with accelerated speed along with gestational age, accompanied by vulvar swelling and pain. Vaginal bleeding was never presented. Due to its rapid growth, surgical excision was performed at GA 28 weeks under intravenous general anesthesia. Pathology study proved its nature to be hemangioma (Figure 1.2). At full term, she received Cesarean section for unfavorable delivery passage, of which compression and laceration of the vessels might lead to uncontrollable bleeding. The newborn female weighted 2900gm with Apgar score 9 at first minute and 10 at fifth minute. The vaginal lesions resolved spontaneously 1 week postpartum.



Discussion

Only four cases of pregnancy-induced vaginal hemangioma were reported in published literature (Table). All cases were multiparous women who experienced protruding mass since early gestation with rapid growth that warranted diagnostic biopsy to exclude malignancy change. Some differential diagnoses to consider include hematoma, rectocele, fecal obstruction, pyogenic granuloma, inclusion cyst, Kaposi's sarcoma, angiosarcoma, endometrioma, varicosities... etc. A plausible mechanism explaining this phenomenon involves estrogen and progesterone receptors in the hemangioma that are reactive to hormone changes during pregnancy. Some are unbearably painful but not in others. Complications included hemorrhage, necrosis, infection, thrombocytopenia (Kasabach and Merritt syndrome), anemia and coagulopathy. All but one case received elective Cesarean section to avoid uncontrollable hemorrhage from rupturing these vessels. All cases had fast spontaneous resolution of the vaginal condition postpartum.

Cases	Age	Obstetrics History	Gestation Age at Presentation	Lesion Description	Management	Outcome
Current Study	37	G2P1	16 weeks	3cm @ left lateral vaginal wall Pain Rapid growth	Surgical excision Intravenous anesthesia Estimated blood loss 10mL	Elective cesarean section at 38 weeks Uncomplicated
Celik et al 2012 [1]	24	Multi-parous	32 weeks	4.2cm @ posterior vaginal wall Painless, necrotic, infected Rapid growth	Surgical excision Regional anesthesia Estimated blood loss 400mL Tocolysis, bedrest, fluid	Vaginal delivery at 37 weeks Uncomplicated
Susini et al 2010 [2]	40	G5P1A3	15 weeks	7cm @ anterior lip of cervix Pain since 8 weeks of gestation Rapid growth	Surgical excision Spinal anesthesia Estimated blood loss 20mL Estrogen, progesterone receptor strongly positive	Elective Cesarean section at 38 weeks
Rezvani 1997 [3]	32	Multi-parous	37 weeks	6x4cm @ posterior vaginal wall Infected, necrotic Rapid growth Painless	Surgical excision Estimated blood loss 500mL Tocolysis, bedrest, fluid	Vaginal delivery at 40 weeks
Emoto 1997 [4]	36	G2P1	27 weeks	5.9x4.7cm, left lateral vaginal wall Painful, pulsation	Transcatheter arterial embolization via left internal iliac artery twice Post delivery	Elective Cesarean section Gestation age unreported

References

- [1] Celik F, Arioz DT, Koken GN, et al. Very rare cause of vaginal mass in pregnancy: cavernous hemangioma. J Obstet Gynaecol. Res. 2012 May; 38 (5): 889-91. [2] Susini T, Molino C, Castiglione F, et al. Masson's vegetant hemangioendothelioma arising in the uterine cervix during pregnancy: a case report. J Womens Health (Larchmt). 2010 Sep; 19(9): 1759-62. [3] Rezvani FF. Vaginal cavernous hemangioma in pregnancy. Obstet Gynecol. 1997 May ; 89 (5 Pt 2):824-5. [4] Emoto M, Tamura R, Izumi H et. al. Sonodynamic changes after transcatheter arterial embolization in a vaginal hemangioma: case report. Ultrasound Obstet Gynecol. 1997 Jul; 10(1):66-7.