

An unusual presentation of heavy menstrual bleeding in Lanarkshire, Scotland.

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Introduction

Heavy menstrual bleeding is a common condition affecting up to 27% of women (i) .

Placental site trophoblastic tumours are a rare type of gestational trophoblastic disease arising from the intermediate trophoblast. They can present many years after pregnancy with irregular or heavy vaginal bleeding.

Atypical placental site nodules (APSN) have been the subject of a small number of publications with a case series of 21 published in 2015(ii).

In 10-15% of cases of APSN, there can be progression to, or an underlying diagnosis of epithelioid trophoblastic tumour (ETT)(iii). Treatment may include hysterectomy or the need for adjuvant chemotherapy.

Case details

A 32 year old woman was referred to the Gynaecology outpatients department in NHS Lanarkshire (population 655,000) from her General Practitioner due to pain and heavy menstrual bleeding. She had tried the progesterone only pill but discontinued this due to low mood.

She had a history of laparoscopically proven endometriosis and was a para 1 having had a previous SVD 3 years prior following IVF with a donor egg due to low AMH.

Clinical examination showed a retroverted bulky uterus and a pipelle endometrial biopsy was taken. Full blood count and thyroid function were normal. Ultrasound showed a retroverted uterus measuring 8.6 x 4.5 x 6.6cms. The endometrium was tri-linear and 6.1mms in thickness. The myometrium appeared normal. The ovaries were both normal and in the left there was a simple cyst measuring 4.5 x 3.1 x 5.3cms.

Pathology results

Endometrial biopsy showed at least an **atypical placental site nodule (aPSN)**. Many of these features may be seen in an epithelioid trophoblastic tumour, however deep invasion was not seen within this biopsy.

Her case was referred to the specialist unit in Charing Cross hospital, London. Following this result, repeat endometrial biopsy was taken which did not show any abnormalities, CT scan was normal and an MRI showed a possible lesion within the uterus. The results were reviewed along with the team in Charing Cross and the recommendation was for hysterectomy. In Pre-COVID times, this would usually have been performed in the specialist unit but due to the ongoing travel restrictions (June 2020) and isolation recommendations this was performed within NHS Lanarkshire.

Treatment plan

She underwent total laparoscopic hysterectomy, bilateral salpingectomy and peritoneal washings. This was performed without complication. **The final pathology showed no evidence of placental site tumour and she was discharged from the Gestational trophoblastic disease unit.**

Discussion

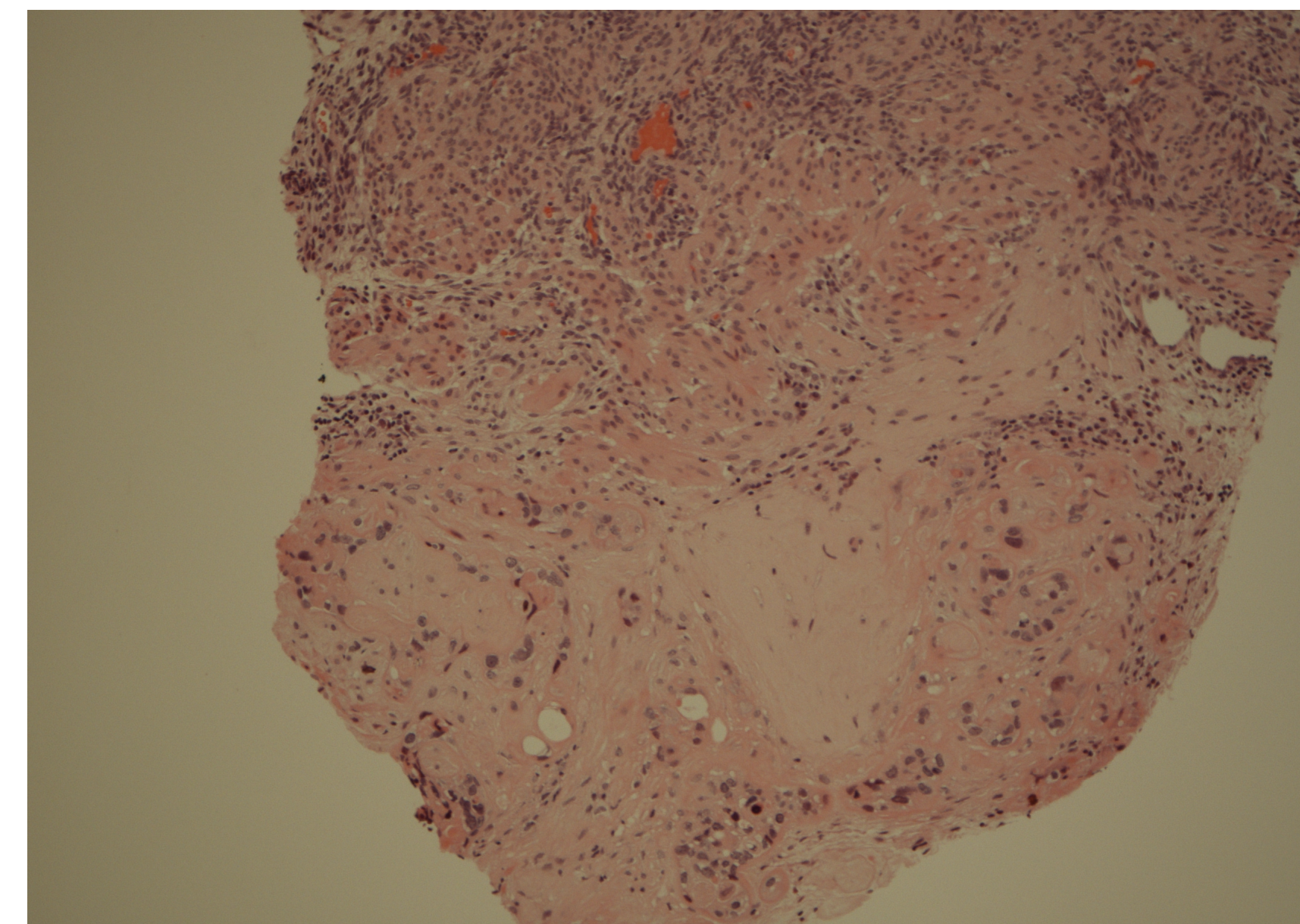
A pubmed search of ‘atypical placental site nodule’ yields 14 results. Of these, there are 5 cases reports. There is also one case series report with 21 cases(ii). In this case series, 14% were associated with malignant disease.

WHO classification

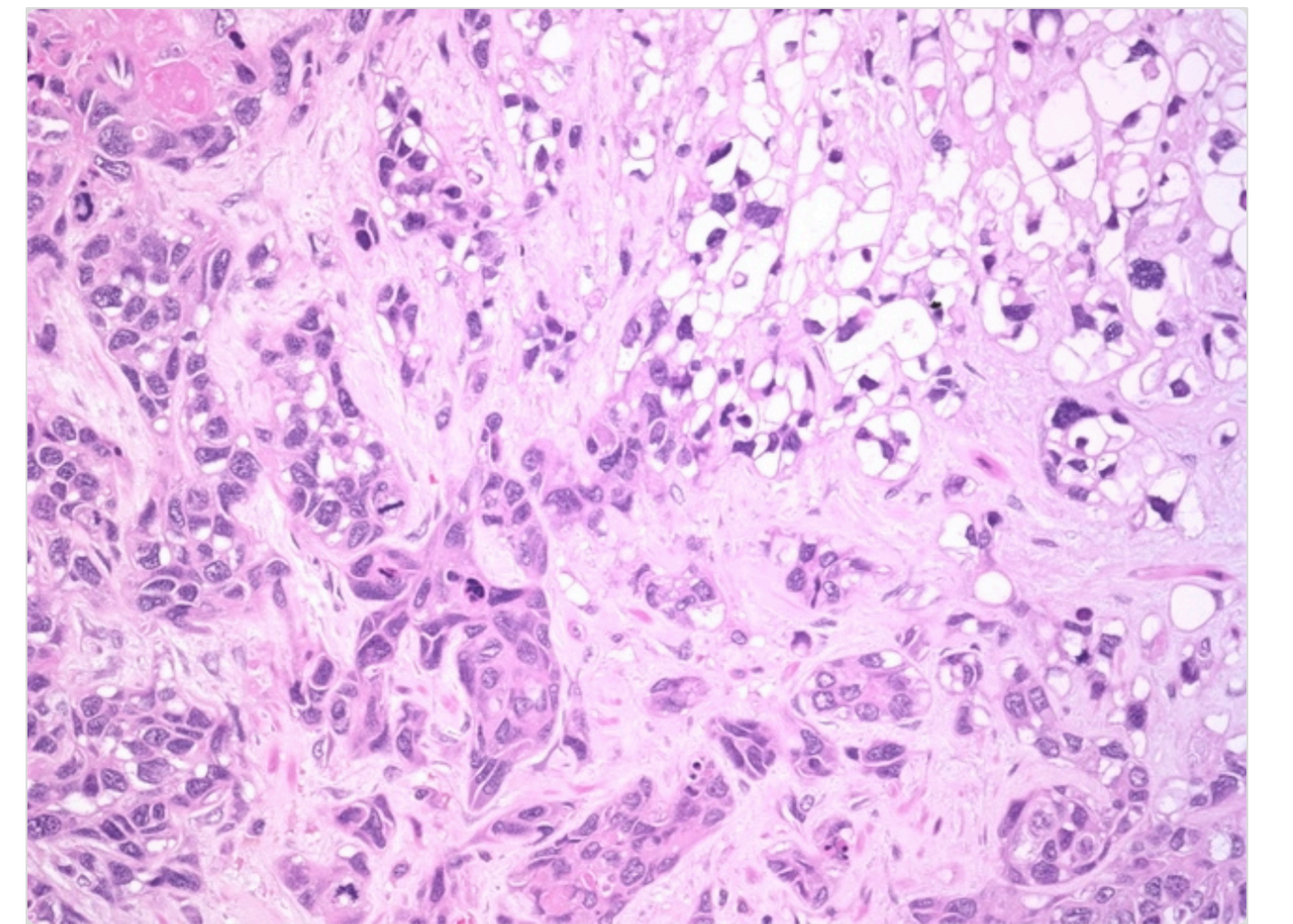
Placental site nodule (PSN) – benign well circumscribed nodule with chorionic-type intermediate trophoblast. Usually an incidental finding and the clinical significance is not well known. Rarely >4mm.

Atypical placental site nodule (aPSN) – cytological atypia and proliferation which exceeds PSN but falls short of ETT. Thought to be an intermediate step between PSN and ETT. In 10-15% of cases of APSN, there can be progression to, or an underlying diagnosis of ETT(iii). Treatment may include hysterectomy or the need for adjuvant chemotherapy. Usually larger in size than PSN.

Epithelioid trophoblastic tumour (ETT) – consists of neoplastic chorionic type intermediate trophoblast. Commonly presents with vaginal bleeding and 80% are associated with a mildly elevated HCG. 25% of cases will have metastasis and there is a 10% rate of fatality.



Placental site nodule without atypia



Pathology slide showing epithelial trophoblastic tumour - moderate cytological atypia and mitotic figures (iiii)

Conclusions

This case highlights the importance of investigation of dysfunctional uterine bleeding and the impact of COVID-19 on standard practice.

Trophoblastic lesions can present a diagnostic challenge and require close liaison between specialist centers and local teams.

This case highlights the difficulty with determining diagnostic certainty in a condition ranging from benign placental site nodules(PSN) to malignant ETT and including APSN, which was thought to be present in this case.

REFERENCES

- i Fraser, I.S, et al. (2015), Prevalence of heavy menstrual bleeding and experiences of affected women in a European patient survey. International Journal of Gynecology & Obstetrics, 128: 196-200. <https://doi.org/10.1016/j.ijgo.2014.09.027>
- ii Kaur B, et al. Atypical placental site nodule (APSN) and association with malignant gestational trophoblastic disease; a clinicopathologic study of 21 cases. Int J Gynecol Pathol. 2015 Mar;34(2):152-8. doi: 10.1097/PGP.0000000000000128. PMID: 25675185.
- iii Clark JJ, Slater S, Seckl MJ. Treatment of gestational trophoblastic disease in the 2020s. Curr Opin Obstet Gynecol. 2021;33(1):7-12. doi:10.1097/GCO.0000000000000674
- iiii <https://www.webpathology.com/image.asp?n=2&Case=589>