

# Hysterectomy for recurrent postmenopausal bleeding revisited: missed sclerosing stromal ovarian tumour

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Sclerosing stromal tumour of the ovary is rare. Patients present with menstrual irregularities, pelvic pain, abdominal distension, and presence of a large pelvic mass during their twenties or thirties. We report a rare case of an ovarian sclerosing stromal tumour with an atypical presentation, in that it gave rise to recurrent postmenopausal bleeding.

## Case report

In January 2009, a 59-year-old menopausal woman presented to the Department of Obstetrics and Gynaecology, Prince of Wales Hospital, Hong Kong, with a history of recurrent vaginal bleeding for 1 year. She was not taking any hormonal replacement therapy or herbal medications. Initial workup did not reveal any adnexal mass, other than a 0.5-cm endometrial polyp on hysteroscopy. Vabra aspiration suggested that the endometrial polyp exhibited a background of secretory endometrium. Despite hysteroscopic polypectomy, her postmenopausal bleeding did not resolve. Thus, hormone levels were checked, which revealed an oestradiol level of 186 pmol/L (reference postmenopausal level, <201 pmol/L) and her follicular stimulating hormone (FSH) level was 21 IU/L (reference postmenopausal range, 25.8-134.8 IU/L). These hormone levels were not consistent with expected levels in a woman who reached menopause 8 years ago. Further transvaginal ultrasound (5-7 MHz) did not reveal any ovarian mass, however. In view of the persistent bleeding, an abdominal hysterectomy and bilateral salpingo-oophorectomy were performed. Intra-operatively, a suspicious 1.5-cm tan-coloured left ovarian solid tumour was found. Histology revealed a sclerosing tumour of the left ovary and normal proliferative endometrium. The postoperative oestradiol level was less than 44 pmol/L and the FSH level was 132 IU/L, which confirmed resolution of the hormonal changes.

## Discussion

Sclerosing stromal ovarian tumours are rare and benign, and were first described by Chalvadjan and Scully in 1973.<sup>1</sup> The majority of cases present during the second and third decades. Postmenopausal presentation is rare. Most of the patients complained of menstrual irregularities, pelvic pain, abdominal distension, and almost all of them were found to have a pelvic mass (mean diameter of about 10 cm).<sup>1-3</sup>

The cause of the menstrual irregularities may be related to the hormonal activity of the tumour, which demonstrated oestrogenic activity<sup>4</sup> and correlated with infertility and endometrial hyperplasia.<sup>5</sup>

Sonographically, they appear as well-defined solid and cystic adnexal masses. Macroscopically, they are solid tumours that may be difficult to differentiate from other malignant and sex cord-stromal lesions. Microscopically, they are characterised by the following distinctive features: (1) cellular heterogeneity with fibroblasts and rounded vacuolated cells, (2) increased vascularity with a 'haemangiopericytomatous' pattern, (3) pseudolobular growth pattern in which cellular areas are separated by oedematous and collagenous hypocellular areas (Fig), and (4) collagenous sclerosis within the cellular areas and cell population.<sup>1-3,6</sup> Immunohistochemistry of smooth muscle actin and desmin distinguishes it from other thecomas and fibromas. Infrequently, the vacuolated cells and the presence of signet ring cells in association with oedematous stroma may be misdiagnosed as Krukenberg tumours, which could be differentiated by recourse to immunohistochemistry.<sup>2,6</sup>

Surgical resection of the tumour is curative. In the literature to date, no local or distant recurrences have been reported.

### Key words

Ovarian neoplasms; Sclerosis

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FIG. The section shows characteristic pseudolobular pattern with cellular nodules, separated by less cellular area or oedematous connective tissue. Thin-walled ectatic staghorn blood vessels are readily seen (H&E, x 50)

## 卵巢硬化性間質瘤導致持續性停經後陰道出血

卵巢硬化性間質瘤很罕見，患者會在20或30多歲時出現月經不調、盆腔疼痛、腹脹或患有巨大盆腔腫瘤。本文報告香港一宗罕見的非典型型卵巢硬化性間質瘤病例，導致患者停經後出現持續性陰道出血。

## Conclusion

We report a rare case of a sclerosing stromal tumour of the ovary in Hong Kong, which was too small to be detected by ultrasound but large enough to cause significant symptoms. Our experience indicated that these sclerosing stromal tumours may be hormonally active and present atypically in the postmenopausal period. Their distinct histopathological appearance and immunohistochemistry are important in aiding diagnosis. Total abdominal hysterectomy and bilateral salpingo-oophorectomy should be performed in those presenting with persistent postmenopausal bleeding, as this rare underlying pathology may be missed.

## References

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