Surgical management options for ovarian cysts in women over the age of 50 by non-CGO gynaecologists: Should we recommend BSO?

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Background

When laparoscopically removing ovarian cysts in women over the age of 50, non-CGO gynaecologists at our hospital chose between cystectomy, bilateral salpingo-oophorectomy and unilateral salpingo-oophorectomy +/- contralateral salpingectomy. The contemporary theory that the majority of high grade ovarian cancers arise from the fallopian tubes promotes the inclusion of bilateral salpingectomy. The ongoing debate regarding the endocrine function of the climacteric ovary makes BSO contentious.

Contemporary theory of epithelial ovarian carcinogenesis

Type I	Type II
Mostly originate from extraovarian lesions which implant on the ovary, become cystic then slowly transform	Mostly originate from intraepithelial carcinoma of the **fallopian tube** (>70%)
Low TP53 mutations	High TP53 mutations
Borderline or low grade malignant potential	High grade malignant potential, rapid clinical progression, usually Stage III at diagnosis
	Responsible for 90% of cancer deaths (1, 2, 3)

Debate on postmenopausal ovarian function

It is agreed that the postmenopausal ovary only secretes a small amount of oestrogen. However, there are differing schools of thought regarding testosterone. Couzinet et al. argue that the climacteric ovary does not secrete clinically significant amounts of androgens (4) Fogle et al. state that the postmenopausal ovary contributes significantly to the circulating pool of testosterone for up to 10 years beyond the menopause (5).

The Royal College of Obstetricians and Gynaecologists argue that postmenopausal ovarian cysts which require surgical excision should be done via BSO (6). While not directly referencing ovarian cyst management, The Royal Australian and New Zealand College of Obstetricians and Gynaecologists state that when managing the adnexae at time of benign disease, BSO should be deferred until the age of 65 (7).

Aims

Determine the excisional technique for ovarian cysts in women over the age of 50 at one institution and describe the histopathology results, dividing epithelial ovarian neoplasia into type I and type II lesions.

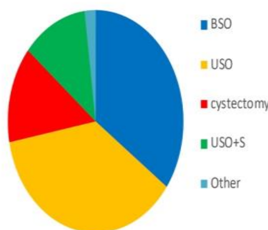
Methods

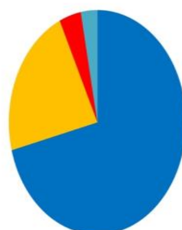
This is a clinical audit of billing numbers, operation reports and histopathology results from all patients of Epworth Freemasons hospital over the age of 50 having treatment of ovarian cysts by non-CGO gynaecologists between 2013 and 2017.

Results

Results: Of the 225 patients, 100 (44.5%) had BSOs, 75 (33.3%) had USOs. 21 had USO +contralateral salpingectomy (9.3%), and 26 (11%) had cystectomies. Over the age of 65, women were more likely to have a BSO.

The rate of cancer and borderline tumours was 2.2%. One woman had metastatic breast cancer and another had lymphoma. There was one type I high grade serous cancer of the fallopian tube and two type II lesions of ovarian cysts with borderline malignant potential.





Conclusion

This audit supports routine bilateral salpingectomy and individualised bilateral oophorectomy in women with ovarian cysts over the age of 50.

References

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