Tertiary centre analysis of borderline ovarian tumours in women <40 years of age with a 5 year follow up.

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Introduction

Borderline ovarian tumours (BOT) in the young pose challenges in management as fertility preservation is a concern. We analysed this cohort treated at our centre to identify the key features and prognostic factors.

Aim

To identify key features at presentation that may indicate higher risk of recurrence of borderline tumours in women of child-bearing age.

Method

CoPath software was used to identify women <40 years of age who were diagnosed with borderline ovarian tumours between 2010 and 2015. 40 cases were reviewed using the histopathological reports and several factors identified as being potential risk factors for recurrence were documented for each case, including bilaterality, surface involvement, tumour size, presence of micropapillary patterns, microinvasion and non-invasive implants.

Cases including women who were over the age of 40 at time of diagnosis and who had carcinoma or invasive implants at initial diagnosis were excluded.

Results

A total of 40 cases were reviewed, 22 of which were serous BOT and 18 were mucinous BOT. 2 cases died and the overall 5-year survival rate was 97.5%.

5 out of the 40 cases had recurred, and 4 of these were serous. 2 out of the 5 cases were FIGO stage II B at presentation and rest were stage I A. 2 out of the 5 cases had non invasive implants.
Of the 35 non-recurrent cases, 18 were serous. All cases were FIGO stage I. None of these cases had implants.

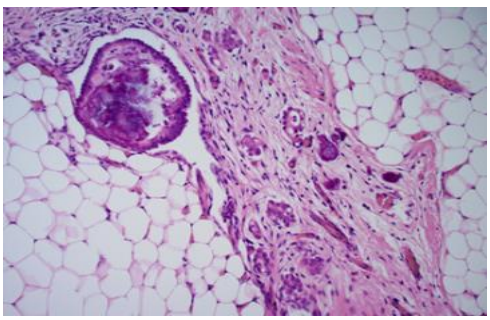


Figure 1. Non-epithelial implants in omentum

Figure 2. Serous borderline tumour

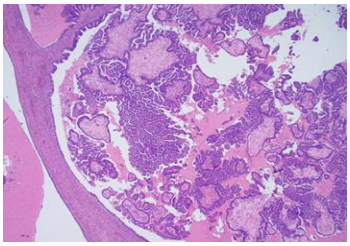
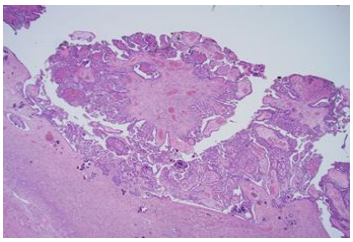


Figure 3. Surface involvement by serous borderline tumour



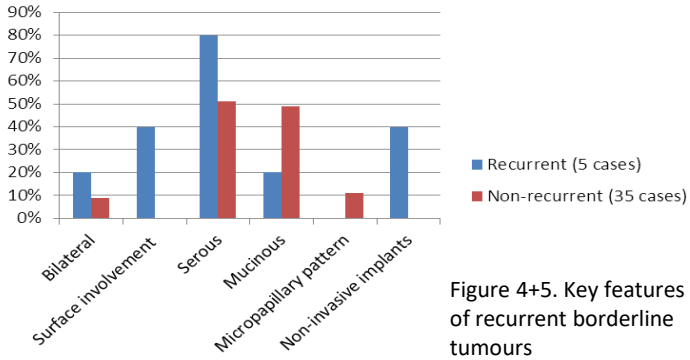


Figure 4+5. Key features of recurrent borderline tumours

		Recurrent (5 cases)	Non-recurrent (35 cases)
Bilateral		1 (20%)	3 (9%)
Initial FIGO Stage	I	3 (60%)	35 (100%)
	II	2 (40%)	0 (0%)
Serous		4 (80%)	18 (51%)
Mucinous		1 (20%)	17 (49%)
Tumour diameter (mm)		6-170	35-500
Micropapillary pattern		0 (0%)	4 (11%)
Non-invasive implants		2 (40%)	0 (0%)

Conclusions

Serous tumours, non-invasive implants and initial stage were identified as the key features associated with recurrences of BOT in our small study.

References
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[2]Morice P, Uzan C, Fauvet R, Gouy S, Duvillard P, Darai E. Borderline ovarian tumour: pathological diagnostic dilemma and risk factors for invasive or lethal recurrence. Lancet Oncol. 2012 Mar;13(3):e103-15. doi: 10.1016/S1470-2045(11)70288-1. PMID: 22381933.