GCT-30 Surgical management of ovarian germ cell tumours

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Background: Surgical resection of advanced epithelial ovarian cancer aims for macroscopic nil residual disease (NR) which improves survival. However, in patients with advanced ovarian germ cell tumours, the extent of surgery is debated. The role of peritoneal and nodal staging is unclear.
Methods: Aim to determine optimal surgical management of ovarian germ cell tumours. Multicentre cohort study in four large UK cancer centres over 12 years.
Results: 138 patients, median follow-up 56.6 months. Overall survival: 93%, event-ree survival (EFS): 72%. Histological subtype powerfully predicted EFS (log-rank $p = 4.9 \times 10^{-7}$). Only 17/137(12%) surgical patients had peritoneal biopsies; 5/17(29%) upstaged. Only 23/137 (17%) had para-aortic/pelvic lymphadenectomy, 6/23(26%) upstaged. 37 dysgerminoma: mostly fertility-preserving operations including 2 patients >1 cm residual disease salvaged with BEP chemotherapy. By contrast, 2(stage 2 and 3c) had non-fertility-preserving surgery leaving NR had BEP. All 42 immature teratoma (IT) had surgery; 3/42 (7%) received neoadjuvant BEP; 6/42 (14%) received adjuvant BEP. None responded to chemotherapy. 3 IT patients relapsed – successfully treated with surgery only (including excision of brain metastases). The only survivor 1/4 PNET (at 2201 days) had radical surgery (resection left hemi-thorax/lung) with NR at time of relapse. 8/53 deaths in yolk sac tumours – no difference by surgery. In summary, peritoneal biopsies and para-aortic/pelvic lymphadenectomy should be considered if results could change management. Fertility-preserving surgery, even in advanced dysgerminoma, is reasonable. Surgical management alone for IT should be considered, in keeping with paediatric practice, even at relapse. Radical surgery should be considered in PNET. Yolk-sac tumour has a poor prognosis.

Debate

GCT-31 Debate: This house believes that there is no place for chemotherapy in the management of immature teratoma: Proposing view

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Background: Ovarian immature teratomas (IT) are rare and account for 1% of ovarian tumours. They are treated by paediatric and adult oncologists with very different treatment approaches. Standard of care for adult women is postoperative chemotherapy, except for FIGO stage IA, grade 1, whereas in children, surgery alone is recommended regardless of stage or grade. The question of chemotherapy or not remains unanswered and a randomized clinical trial is not feasible due to the rarity of ovarian IT. In this debate, we will address why we think there is no place for chemotherapy in management of ovarian IT.
Methods: A literature review was conducted to identify studies addressing the outcome of ovarian IT.
Results: A pooled analyses from the Malignant Germ Cell International Consortium (MaGIC), compared 2 adult and 2 paediatric clinical trial data. Ninety of the 98 paediatric patients were treated with surgery alone, whereas all 81 adults received postoperative chemotherapy. Despite difference in management, there were striking similarities in the results with 5-year EFS and OS of 91% and 99% for the paediatric cohort and 87% and 93% for the adult cohort [1]. A recent multicentre cohort study from the UK reported on 42 patients with ovarian IT (15 <18 years and 33 ≥18 years). Nine patients received chemotherapy (3 pre-operatively and 6 post-operatively) and 33 patients had surgery only. There was no difference in relapse between the groups. Interestingly, they found little evidence of radiological response in patients who received pre-operative chemotherapy [2].
Disclaimer: Please note that the views expressed in this abstract, and during the debate *per se*, may not necessarily reflect the views and beliefs of those individuals proposing and/or opposing the motion.

References

[1] Newton C, Murali K, Ahmad A, Hockings H, Graham R, Liberale V, Sarker SJ, Ledermann J, Berney DM, Shamash J, Banerjee S, Stoneham S, Lockley M. A multicentre retrospective cohort study of ovarian germ cell tumours: Evidence for chemotherapy de-escalation and alignment of paediatric and adult practice. *Eur J Cancer*. 2019 May;113:19–27.
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GCT-32 Debate: This house believes that there is no place for chemotherapy in the management of immature teratoma: Opposing view

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Background: Ovarian germ cell tumours (OGCT) are rare tumours arising in young women. These tumours include several subtypes sharing in general good prognosis but sensitivity/dependency to chemotherapy can be variable.
Methods: Comprehensive literature review.
Results: The question of adjuvant chemotherapy in pure ovarian immature teratoma (IT) remains unsolved to date and illustrates differences in management between paediatric and adult oncologists. Because of the rarity of IT, this question has never been addressed through randomised trials. Standard of care for adult women with ovarian IT is postoperative platinum-based chemotherapy for all patients except FIGO stage IA, grade 1 tumours, whereas paediatric series concluded that surgery alone is curative for completely resected ovarian IT, regardless of grade. Moreover, the role of chemotherapy in incompletely resected tumours and its impact on the rate of relapse needs to be better assessed. Chemosensitivity of IT is a matter of debate. The development of a prognostic score may help to make appropriate risk-based decisions about therapy in this disease, in order to increase