Specimen integrity (Recommended)

Reason/Evidentiary Support

Assessment of the integrity of the specimen (ovary or tube) is important, particularly for substaging of organ-confined disease (Stage I). Information should include whether the ovarian capsule or tubal serosa is intact or ruptured, and also if there is tumour on the surface, or whether the tumour was received fragmented or intact. In case of capsule rupture, it is recommended to try to ascertain if rupture occurred before or during surgery (this is important in substaging FIGO stage IC disease - see next paragraph), although obviously this information should be provided by the surgeon. Occasionally there is microscopic ovarian surface involvement in the absence of gross capsular deficiency and this should be recorded (see **Note 5 MACROSCOPIC TUMOUR SITE/HISTOLOGICAL SITES OF TUMOUR INVOLVEMENT**).

Approximately 25% of ovarian cancers are FIGO stage I at diagnosis, with a 5-year-survival of 83-90%.[1,2] According to the 2014 FIGO staging system for ovarian, tubal and primary peritoneal cancer,[3] ovarian capsular or tubal serosal rupture before surgery is considered stage IC2 while intraoperative rupture is 1C1. There is some controversy as to whether rupture during surgery worsens the prognosis in the absence of surface excrescences, ascites or positive washings. Some studies showed a higher risk of recurrence in association with intraoperative ovarian capsular rupture,[4,5] while others did not.[6-8]

A recent meta-analysis[3] assessed the impact of intraoperative rupture on prognosis, after analysing nine eligible studies which included 2382 patients. Patients with preoperative capsular rupture showed poorer progression free survival (PFS) than those with no rupture or intraoperative rupture. In subanalyses, preoperative rupture was associated with a worse prognosis, and intraoperative rupture had a poorer PFS than no rupture. However, no difference in PFS was found between intraoperative rupture and no rupture in patients who underwent a complete surgical staging operation, with or without adjuvant platinum-based chemotherapy.

There is some evidence to suggest that clear cell carcinomas exhibit a higher risk of rupture,[9] probably related to adhesions to the surrounding tissues, associated with tumour invasion or endometriosis.[10] Capsular rupture has also been associated with pregnancy.[11]

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