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## *Arbiter:*

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OVARIAN CARCINOMA is one of the most frequent gynaecological cancers in Europe, with an age-adjusted incidence rate of 11/100 000 [1]. Epithelial ovarian carcinomas account for 85% of all cases and are not currently amenable to early detection by screening. Only 30% of cases will be found to have localised FIGO stage I and II, for which poor prognostic factors include non-differentiation, extracystic tumour or ruptured capsule, positive peritoneal cytology or ascites, extra-ovarian disease and dense adherence of the ovary to pelvic structures [2]. Reported 5-year survival rates range from 50 to 70% in stage I, and from 38 to 60% in stage II [3]; for each stage, these differences are more often explained by understaging due to an incomplete explorative laparotomy, particularly in the upper abdomen and para-aortic lymph node region, which is why the degree of expertise of the surgeon is particularly relevant.

Patients with stage I grade 1 tumours enjoy a good 5-year overall survival higher than 90% and are at very low risk of relapse; after adequate surgery, they do not need any adjuvant treatment [3]. Patients classified as stages IA/B grade 2–3 and II, completely resected after comprehensive staging made according to EORTC guidelines, do require adjuvant treatment which is aimed at reducing the likelihood of abdominopelvic relapse and improving survival. The combination of cisplatin and cyclophosphamide is in favour with surgeons and medical oncologists since the GOG study comparing the combination of cisplatin plus cyclophosphamide (CP) versus the CAP combination (cisplatin, doxorubicin and cyclophosphamide) found no significant difference in progression-free survival or in overall survival in advanced ovarian carcinoma [4]. Similar results have been reported from The Netherlands Joint Study Group Trial comparing CP versus CHAP-5 [5]. Abdomino-pelvic radiotherapy (APRT) has been abandoned without convincing justification after completion of a randomised trial comparing melphalan and a moving strip field [6]; these results showed no difference in survival per arm and per stage, and there were 2 deaths from radiation bowel injury and two from acute leukaemia after chemotherapy [7]. APRT with an open-field technique is the reference technique: it is equal to the moving strip technique with regard to efficacy, but simpler to deliver, with a shorter overall treatment time (6–7 weeks compared to 11–13 weeks) and a significant decrease of late

morbidity [2, 8]; moreover, APRT gives a better distribution of the dose as compared with intraperitoneal  $^{32}\text{P}$ .

From a multidisciplinary point of view, adjuvant treatment still remains controversial since there is no consensus between a cisplatin-based chemotherapy, APRT or no further treatment. The results of three ongoing phase III randomised trials are eagerly expected. ICON 1 from the MRC and ACTION from the EORTC gynaecologic group are investigating stages IA/IB grade 2–3, IC, IIA, comparing four or more courses of cisplatin ( $75\text{ mg/m}^2$ ) or carboplatin ( $350\text{ mg/m}^2$ ), preferably in combination with cyclophosphamide ( $750\text{ mg/m}^2$ ) with a 'wait-and-see' policy; they have so far accrued just over 500 patients. The EORTC trial 22925, supported by the radiotherapy Cooperative Group and set up in 1994, is comparing whole abdominal radiation ( $22.5\text{ Gy}/22\text{ fractions}/4.5\text{ weeks}$ ) followed by a pelvic boost ( $22.5\text{ Gy}/10\text{ fractions}/2\text{ weeks}$ ) with the optimal known combination of six courses of cisplatin ( $75\text{ mg/m}^2$ ) and cyclophosphamide ( $750\text{ mg/m}^2$ ), in high risk, completely resected stage I grade 2–3, IIA, IIB epithelial ovarian carcinomas; the aim is to assess overall survival, morbidity and quality of life, but unfortunately, the accrual has, so far, been poor.

In the above articles, two outstanding specialists give their opinions about the role of external irradiation. Bolis and associates, advocate no irradiation since they find, in the literature and from their own data, no evidence of efficacy on survival; they are also concerned about the high rate of complications due to post-operative radiotherapy. Fyles gives updated data comparing APRT and monochemotherapy with or without pelvic irradiation, and from this it seems that APRT appears to be superior; the Princess Margaret Hospital is the most experienced worldwide with APRT. The quality of the long-term results have been confirmed by other centres from different countries. Nevertheless, all these data will be interpreted differently according to the speciality, the oncological culture and the multidisciplinary approach of each physician; moreover, it is very likely that the promising results of taxanes in stages III [9] will hamper the advances of new techniques of external irradiation such as hyperfractionated irradiation, which enable the total dose to be increased while reducing the overall treatment time [10].

On the eve of the third millenium, more collaboration is needed in order to determine what adjuvant treatment(s) is best for women who have been surgically treated for a local epithelial ovarian carcinoma with a high risk of relapse. Randomised trials, provided they are conceived on a multi-

disciplinary basis, should pave the way for the right therapy(s).

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