Editorial

Neoadjuvant Chemotherapy for Advanced Ovarian Cancer

Ovarian cancer is the second common gynaecological malignancy. While the five year survival for early stage is about 90%, the prognosis of patients with advanced disease remains poor, 5-year survival being 10 to 30%. Primary surgical cytoreduction followed by paclitaxel plus platinum based chemotherapy is currently the standard treatment approach. The amount of residual disease after surgery is inversely related to overall survival; patients with optimum cytoreduction (defined as $\leq$ 1cm residual disease) have superior outcome compared to those with sub-optimal cytoreduction (>1cm residual disease). In many such patients (with large volume or inoperable abdomino-pelvic disease, intestinal obstruction, or gross pleural effusion and poor performance status) surgical efforts to debulk optimally may be associated with considerable intra and postoperative morbidity and mortality (1-6%). A number of investigators have studied use of primary or neoadjuvant chemotherapy (NACT) in such women. The response rate to NACT had varied from 60% to 80%; Following interval debulking surgery optimal debulking is achieved in 50 to 80% of patients. The overall outcome of such patients is comparable to those achieved with primary debulking surgery followed by chemotherapy. Certain sites are considered not amenable for optimal debulking e.g. lesions involving diaphragm, gall bladder fossa, porta hepatis, base of small bowel mesentery, liver parenchyma, splenic lesions and retroperitoneal nodes. Neoadjuvant chemotherapy has been proposed as an alternative approach in such patients as initial treatment with the goal of improving surgical quality and increasing the chances of optimal debulking. CAT scan of abdomen and pelvis could be of help in identifying such patients prior to surgery.[2]

In this issue of journal, Sharma et al from South India have retrospectively analyzed results of 58 patients with advanced ovarian cancer patients operated at their centre; 36 patients received NACT. The optimal cytoreduction rate was higher in the NACT arm (83.3% vs 53.6%, $p<.02$) compared to those in primary surgery arm.[3] These observations are similar to many earlier reports.[4] Bristow et al have recently reported results of a meta analysis; in their analysis NACT was associated with inferior outcome.[5] Lack of randomized prospective trials and small number of patients have been major limitations to interpret the results in many of these studies. Further, there is a bias to select patients for NACT. The role of NACT in advanced ovarian cancer may possibly be answered more clearly in a randomized trial in large number of patients. EORTC has recently completed accrual of 704 patients in a multicentric, international trial. Another single centre study is currently undergoing at the All India Institute of Medical Sciences, New Delhi-India, and 140 patients have been recruited till date.[6] Results of both studies are eagerly awaited.

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