AGGRESSIVE SURGICAL TREATMENT IN CERVICAL TUMOR WITH MULTIPLE LOWER ABDOMINAL DISSEMINATIONS

Irina Bălescu¹, N. Bacalbașa², Claudia Stoica³, R. Sgarbura³, Dana Tomescu⁴

¹“Ponderas” Hospital, Bucharest, Romania

²“Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

³“Ilfov” County Hospital, Bucharest, Romania

⁴Department of Anesthesia and Intensive Care III, Fundeni Clinical Institute Bucharest Romania

Abstract In cases with advanced cervical cases, with large lymph node metastases or solitary peritoneal masses the patient is candidate rather for debulking surgery than systemic treatments. Several studies have proven that radiotherapy is inefficient for tumoral masses larger than 2 cm. In this case report we present a 55 years old patient with advanced cervical cancer, large lymph node metastasis and a solitary peritoneal mass. A radical hysterectomy with bilateral adnexectomy, lymph node dissection and mesosigmoid mass resection were performed. The patient was addressed to adjuvant chemotherapy.

Key words: advanced cervical cancer, large lymph node metastases, debulking surgery, irradiation

Introduction

Cervical cancer is the second most common malignancy among women worldwide. There are still a large number of patients who are diagnosed in an advanced stage of the disease (III, IVA). Preoperative routine evaluation prior to decide which the appropriate treatment planning is includes CT and MRI of abdomen and pelvis. If large tumoral masses are found (lymph node metastases or peritoneal masses), the patient is candidate for debulking surgery, and later submitted to adjuvant systemic therapy.

Case report

We present a 55 years old patient who was addressed to our service for persistent vaginal bleeding associated with pelvic pain. The local gynecologic exam showed a large cervical mass, invading the left parameter. The biopsies revealed nonkeratinized squamous moderately differentiated carcinoma. The CT scan showed a large cervical mass measuring 14/10 cm with large peritoneal masses (left iliac fossa and infra-renal para-aortic). Due to the extracervical presence of disease the multidisciplinary board decided to perform per primam debulking surgery; radical total hysterectomy.

Address for correspondence: Nicolae Bacalbașa, MD
Dimitrie Racoviță Street, no. 2, Bucharest, Romania, e-mail: nicolae_bacalbasa@yahoo.ro

tomy with bilateral adnexectomy, with pelvic, inter-aortico-caval, para-aortic lymph node dissection; the tumoral mass in the mesosigmoid was also resected. (fig. 1-7) Resection of the mesosigmoid mass required ligation at the origin of the inferior mesenteric artery; however, the integrity of the marginal arcade was preserved, so no colic resection was necessary. A special mention needs to be made concerning the lymphodissection: the patient presented with a large retro-aortic lymph node, which was approached for resection after complete dissection and mobilization of the aorta, achieved by ligation and section of two lumbar arteries. The post-operative evolution was uneventful, the patient was discharged in the 10th postoperatively day and she started the adjuvant oncologic treatment 2 weeks later.

Discussions

The 2 main patterns of spread for cervical cancer are lymphatic channels and direct local invasion; while the second pathway can be relatively easy managed by the radical surgical treatment, the first one is more frequent and represents a poor prognostic factor associated with higher rates of fatal recurrence. (1) The most common sites of metastases are pelvic and para-aortic lymph nodes, and both of them worsen the prognosis. (2-6)

In order to obtain a better survival in these cases, lymph node metastases can be treated by radiotherapy if they are recognized before surgery or by debulking surgery if they are found intraoperatively. It seems that the two modalities of treatment report the same curative rate for small tumoral masses, while their combination leads to an increased morbidity with no benefit on survival (2,6,7,8). According to radio-biological studies, a 2 cm mass needs 60 Gy of external beam radiotherapy to be sterilised in 90% proportion and 75 Gy to achieve 100% control, this dose being intolerable for the surrounding organs. (9) A higher dose of irradiation can not be administrated to the para-aortic area. In these cases surgical debulking via laparotomy or laparoscopy before adjuvant chemo-irradiation proved to be efficient (1, 2,3,5, 10-17)

In Potish's study, 159 patients with advanced cervical cancer underwent surgery prior to radiotherapy; the 5 year relapse free survival ranged between 86% in patient with resectable pelvic lymph node metastases to 0% in cases with

Figure 1 - Large tumoral mass in the mesosigmoid

Figure 2 - Sectioning of a lumbar artery

Figure 3 - Inter-aortico-caval and iliac bilateral lymph node dissection

Figure 4 - The final aspect after radical hysterectomy with bilateral adnexectomy and pelvic lymph node dissection

Figure 5 - The final aspect after removing a large retro-aortic lymph node metastasis: both the left common iliac artery and abdominal aorta are completely dissected

Figure 6 - The final aspect after pelvic and inter-aortico-caval lymph node dissection

Figure 7 - The specimen of total hysterectomy with bilateral adnexectomy presenting a large cervical tumor

unresectable pelvic adenopathies. (12) A more elaborated study was reported by Cosin et al; they analyzed 266 patients with cervical cancer, who were divided in 4 groups: group A – no lymph node metastases, group B – resected microscopic lymph node metastases, group C – resected macroscopic lymph node metastases and group D – unresectable lymph node metastases; disease free survival rates were similar in groups B and C. Similar 5 year survival rates for women with macroscopic lymph node metastases which were resected compared to those with microscopic lymph node metastases were reported (43% survival in macroscopic lymph node metastases compared to 50 % survival in

microscopic lymph node metastases). (11) At the other pole we find the patients with large adenopathies which could not be resected; in this group the 3 year overall survival is situated between 0-3%) (11,12).

Zighelboim et al tried to determine which are the specific parameters that could be considered as prediction factors of success in the surgical ablation prior to systemic therapy (chemoradiation). The patient's age, the size of the largest lymph node and its' location seemed to be the most important factors. Elderly patients, with lymph node metastasis larger than 2 cm, invading the vascular structures, the bones and those located above the superior mesenteric artery had a worse outcome. (6)

The presence of peritoneal tumoral masses is also an important factor predicting the relapse of the disease. Sometimes it cannot be seen in preoperative investigations (CT,MRI) and is an intraoperative finding (6). Debulking surgery, either for large adenopathies or for peritoneal masses seems to make sense; the microscopic tumoral tissue left behind will be now easier managed by the systemic adjuvant therapy.

Conclusions

While radio-biological studies are trying to increase the radiation dose to the target organ and spare the adjacent structures by using intensity modulated radiotherapy, surgery remains the best option for patients with cervical cancer associated with bulky lymph node. (2)

Removing large metastatic lymph nodes and solitary peritoneal masses before systemic chemotherapy seems to improve the disease free interval and overall survival in cervical cancer, but prospective randomized studies and longer follow-up periods are still needed.

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