Current status of preoperative and adjuvant irradiation in endometrial cancer: a CTF analysis in Western Europe

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ABSTRACT The aim of this study is to define the clinical-therapeutic approach to endometrial cancer currently being followed in some of the most important centres of reference for gynecological cancer in Western Europe, focusing the role of preoperative and adjuvant irradiation in pathologic T1 (pT1) cases. The analysis of the management of this neoplasia in Western Europe countries shows significant differences regarding some particular clinical conditions. The presence of lymph node spread is generally considered to be the most important prognostic factor, and currently, radiotherapy of the pelvis appears to be the treatment of choice either as the sole postsurgical therapy (57%) or in combination with systemic treatment. An adjuvant treatment in stage I lymph node-negative patients is adopted in the large majority of the centres (75%) when poorly differentiated cancer and/or deep myometrial invasion are present. In this condition, radiotherapy appears to be the therapy of choice. The conflicting data which emerge from our research, induce the need of defining common guidelines for standard treatment and large scale multicentric clinical trial concerning the therapeutic choice in particular subgroups of patients with endometrial cancer.

Key words Endometrial carcinoma, diagnosis, treatment.

INTRODUCTION Endometrial carcinoma was once considered a neoplasm with a relatively favourable prognosis because a large number of cases are clinically diagnosed at an early stage, and are therefore limited to the corpus uteri (1-2). In addition, the tumor has a more favourable prognosis than carcinoma of the uterine cervix (1, 3-6) and a lower incidence of lymph nodes metastases in the early stage compared to cervical carcinoma (2, 4). The survival rate for some subgroups of patients (neoplasia of corpus uteri with infiltration only involving the myometrium, in the absence of pathological risk factors and if created by adequate surgical therapy), is very high (2, 7). However advanced knowledge of the natural history of endometrial carcinoma, its real potential for lymph node spread and the high level of correction of clinical stage after intensive anatomical-surgical evaluation, have produced a substantial revision of such consideration. As a matter of fact many patients with stage I disease are submitted to various types of adjuvant treatment on the basis of different considerations and risk factors. Radiation therapy either on the pelvis or in combination with brachytherapy on the vaginal vault is often used after surgery with various rationale of application.

Beyond the various definitions of stage (8), other prognostically important pathological factors have been indicated in endometrial cancer which are of considerable importance in the planning of treatment. Among these, histotype (9-10), histological grade (11-13), myometrial invasion (14-17), capillary-like space invasion (18-20), peritoneal cytology (21-24), and lymph nodes metastases (7, 11-12, 25) are currently considered to carry different weight in the definition of prognosis and in the planning of postsurgical treatment.

The aim of this study is to define the clinical-therapeutic approach to endometrial cancer now being followed in some of the most important centres of reference for gynecological cancer in Western Europe focusing the role of preoperative and adjuvant irradiation in pT1 cases.

MATERIAL AND METHODS Data were collected by means of a questionnaire on specific diagnostic and therapeutic options, sent to 115 leading centres for gynecological oncology in Western Europe. There were 82 responses by the end of April 1994 from centres which treated at least 25 cases of endometrial carcinoma per year (mean 44.5; median 30.0; range 25-250).
Maggino T, et al. The questionnaire focused on the following items: 1) Surgical staging and therapy aiming to define the role and effort in lymphadenectomy, the indications for enlarged and vaginal hysterectomy, the role of peritoneal cytology in the prognosis and treatment planning. 2) The choice of adjuvant treatment in stage pT1 in respect of: stage IC; lymph nodes positivity, histological grade and histotype. 3) Treatment modification according to age and menopausal status. 4) Management of advanced stages.

Complete report of the study was already published in European Journal of Cancer (26). This report will focus the aspects particularly related to adjuvant radiotherapy and preoperative irradiation.

RESULTS
Adjuvant treatment in FIGO stage IC The vast majority of western oncological centres (70/79; 88.6%) consider mandatory a postsurgical adjuvant treatment when deep myometrial infiltration is pathologically documented. Concerning the type of treatment, radiation therapy on the pelvis is predominantly use either alone (63.3%) or in association with systemic treatment (20.3%). Seven centres were involved in randomized clinical trials comparing radiotherapy versus observation or radiotherapy versus chemotherapy (Italian Study Group).

Adjuvant treatment in pT1 lymph nodes negative cases No indication for adjuvant treatment in such condition was declared by 29.5% of centres. Particular indications were recognized by 70.5% of centres such as: poorly differentiated tumours (43) and deep myometrial invasion. Radiotherapy in such cases was the treatment of choice either alone (63.3%) or in combination with systemic treatment (20.3%). Hormons and chemotherapy were rarely adopted, respectively 3.8% and 1.3%.

Adjuvant treatment in pT1 lymph node positive cases All European centres declared to perform adjuvant treatment in such condition Radiotherapy is the treatment of choice either alone (57%) or in combination with systemic treatment (38%).

Indication for brachytherapy of the vaginal vault in pathological stage I neoplasia. Brachytherapy is routinely used in 10 (12.8%) centres, while 20 (25.6%) institutions never perform this therapeutic approach. In 48 institutions (61.5%), the predominant indications for brachytherapy were dictated by poorly differentiated tumours (43.3%), deep myometrial invasion (32.8%) and inadequate surgery (5.9%).

Pretreatment radiotherapy in early stages This approach is considered in 16.9% of the centres while in 83.1% of centres there is no indication at all.

DISCUSSION Even though there is general agreement on the usefulness of surgical staging and primary surgery in endometrial cancer, analysis of the management of this neoplasia in Western European countries shows significant differences regarding some particular clinical conditions. The presence of lymph node invasion is generally considered the most important prognostic factor which heavily influences postsurgical decision-making. In fact, there is a general agreement in the adoption of an adjuvant treatment in such a condition. At present, radiotherapy on the pelvis appears the treatment of choice, either as the sole postsurgical therapy (57.0%) or in combination with systemic treatment. An adjuvant treatment in pT1 lymph node-negative patients is given in the large majority of the centres (70.5%) when poorly differentiated cancer and/or deep myometrial invasion are present. In this condition, radiotherapy appears to be the therapy of choice either alone (63.3%) or in combination with systemic treatment (20.3%). Particularly for stage IC, systemic treatment is seldom used. Hormone therapy is given in 3.8% of the centres, even though long term analysis of a randomized study failed to detect any benefit from medroxyprogesterone acetate as adjuvant treatment in such a condition (27).

The conflicting data which emerge from our research concerning the therapeutic choice in particular subgroups of patients with endometrial cancer induce the need of defining common guidelines for standard treatment and large scale multicentric clinical trial for the more controversial aspects.

REFERENCES


