

PRIMARY SURGERY IN THE TREATMENT OF CERVICAL CARCINOMA

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No clear-cut opinion can yet be reached, on the basis of existing literature, on the therapeutical program to be preferred in the management of cervical cancer, at least as far as survival is concerned. Therefore the evaluation of therapeutical results achieved in cervical carcinoma must chiefly aim at estimating which therapy involves lower costs in terms of incidence of complications.

Undoubtedly the treatment of cervical carcinoma is no longer considered to be of either radiotherapeutical or surgical exclusive competence. On the other hand many treatment schemes tend to combine radiotherapy and surgery, in some groups of patients, more than is rationally needed.

Combined therapies involve a risk of overtreatment which is inevitably associated with increased complications. To be 'combined', therapies must be integrated which means that each intervention must follow the same logic as the previous and subsequent ones. With this objective in mind we shall try and analyse the logic underlying some schemes of radiosurgical combined treatment in order to establish the most rational sequence and timing for integrating the two therapeutical times.

To begin with let us say that failure to identify an elective therapeutical program in cervical cancer is due to:

1) dissimilarity of the therapeutical approaches adopted in the various classes of risk;

2) inadequacy of FIGO staging to identify therapeutical categories though offering diagnostic grading;

3) unlikeness of cases regarded as 'technically operable' in different series;

4) difference of timing and surgical or radiotherapeutical techniques adopted in the various forms of therapeutical integration.

Furthermore within each FIGO stage factors of risk of local or loco-regional relapse can be detected which may prove very useful to identify the various therapeutical categories.

SUMMARY

The Author analyses the rationale for operative staging in cervical carcinoma.

First-instance surgery in the treatment of this neoplasia can be merely exploratory, when during the operation radical removal of the neoplasia appears to be technically impossible. It can nevertheless identify the surgical stage, make lymphnodal histological control possible and detect target volumes for subsequent radiotherapy.

In technically operable cases thanks to primary surgery not only can the primitive focus be controlled but through the pathologic study of the surgical specimen factors of risk for local or loco-regional relapse can be detected thus directing the planning of metasurgical radiotreatment.

RISK FACTORS IN CERVICAL CARCINOMA

- Tumour size ⁽¹⁾.
- Depth of cervical invasion ^(2, 3).
- Growth pattern (endophytic, exophytic) ⁽⁴⁾.
- Histologic grading ⁽⁵⁾.
- Involvement of vascular spaces ^(2, 3).
- Lymphatic diffusion ^(6, 7, 8).

From a general point of view cervical cancers can be divided into technically operable tumours (usually T1b, T2a and early T2b) and technically non operable tumours (late T2b, T3, T4).

This division presents obvious limitations but is exclusively intended to distinguish between cases in which surgery can be included into a complex therapeutic program in view of a radical result and cases in which surgery can also be performed but radiotherapy must play the chief role.

In all cases, however, surgical intervention must come first. It may either aim at a radical ablation of the neoplasia, if primary surgical therapy has been planned and local conditions confirm clinical operability, or be confined to surgical exploration if surgical staging does not confirm clinical indications of operability.

When pre-operative or radical radiotherapy is preferred to primary surgery exploratory surgery (pre-therapy surgical look) is nevertheless indicated to evaluate the real chances and target volumes of the radiotherapy besides directing planning of possible integrated therapies.

Surgical staging may therefore either suggest rational guidelines for the sequence of integrated therapies (pre-operative curietherapy, pre- or post-operative TCT) or lead to the decision of performing exclusively radiotherapy.

In technically operable tumours three main patterns of therapeutic integration may be identified:

- 1) pre-operative curietherapy;
- 2) pre-operative telecobaltotherapy;
- 3) primary surgery followed by radio-treatment.

1) PRE-OPERATIVE CURIETHERAPY

a) *Rationale*

- sterilization of primitive focus in small stage 1b cases;
- reduction of primitive focus to help surgery in large 1b cases or in special forms (bulky, barrel shape);
- prevention of central relapses in stage 2a cases.

b) *Objections*

- no need for double treatment of primitive focus in low-risk 1b forms (overtreatment);
- missed opportunity to identify prognostic risk factors by examining the surgical specimen.

2) PRE-OPERATIVE TELECOBALTOATHERAPY

a) *Rationale*

- reduction of neoplastic volume to allow more limited surgery in large stage 1b and 2a cases or in special forms (bulky, barrel shape);
- reduction of neoplastic volume in advanced stages to make technically non operable cases operable.

b) *Objections*

- irradiation of neoplasia-free areas in a significant number of stage 1b and 2a cases (overtreatment);
- in cases with positive lymph-nodes, lymphadenectomy after TCT does not improve prognosis significantly (Rutledge);
- post-TCT surgery shows high incidence of complications in several series;
- surgical staging can be modified by the previous radiotreatment.

3) PRIMARY SURGERY

IN CERVICAL CARCINOMA

a) *Rationale*

- surgical staging allows accurate definition of the pathologic stage by correcting FIGO clinical staging;
- histologic control of lymph-nodes;

- ablation of the primitive focus;
- detection of risk factors by pathologic examination of the surgical specimen;
- guidelines for logical planning of metasurgical radiotherapy:
 - a) identification of indications,
 - b) choice of treatment (curietherapy, telecobaltotherapy),
 - c) identification of target volumes;
- identification of disseminated disease (peritoneal involvement, lombo-aortic lymphnodal metastases) requiring systemic treatment;
 - for many patients surgery is the definitive therapeutical program.

Therefore the cost-benefit analysis of the treatment shows that primary surgery in cervical carcinoma prevents:

overtreatment, as post-operative radiotherapy can be confined to cases with the most unfavourable prognoses (positive lymph-nodes, presence of markers of risk for local and locoregional relapse);

undertreatment, as it makes it possible to identify cases in which local or locoregional treatment would fail to master the disease and require therefore systemic treatment.

The seriate examination of the surgical specimen is a fundamental step in the study of tumoural diffusion patterns and biology.

Tumour stage and size being equal, there are preferential factors of tumour

diffusion related to its biologic characteristics: histotype, differentiating grading, lymphotrophy etc.

Furthermore, over and above staging, cases of histologically confirmed lymphnodal invasion all fall within a homogeneous risk class whose identification is vital to a rational treatment planning.

Therefore primary surgery, making surgical staging and examination of the operative specimen possible, is a unique opportunity to be seized, in our opinion, virtually always, even in cases of advanced tumour (9).

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