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HAEMOPOIETIC GROWTH FACTORS - WHAT FOR?
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There are currently 3 haemopoietic growth factors which are commercially available - erythropoietin (EPO), granulocyte colony-stimulating factor (G-CSF) and granulocyte-macrophage colony-stimulating factor (GM-CSF). Several other growth factors including IL-1, IL-3, IL-4, IL-6, IL-8, IL-11 and Stem Cell Factor are being evaluated in clinical trials.

EPO has been shown to reduce red cell transfusion requirements during chemotherapy (particularly cisplatin-based) and to decrease platelet toxicity. It also reduces the degree of anaemia in multiple myeloma and low grade NHL. Results of cost-benefit assessments are needed before use in these settings could be justified EPO abrogates the fall of haematocrit in bone marrow donors if given before harvesting and may be of value for paediatric donors.

The myloid growth factors G-CSF and GM-CSF both reduce the duration of neutropenia after standard dose chemotherapy. This translates into decreased incidences of febrile neutropenia, infections and treatment delays with G-CSF (randomised studies have not yet demonstrated this for GM-CSF). Both G-CSF and GM-CSF allow earlier recovery of neutrophils after high dose chemotherapy (+/- TBI) if given following bone marrow tranplantation. They also enable harvesting of peripheral blood stem cells which markedly improves the rate of recovery after high dose therapy.

Both factors may increase the neutrophil count in patients with myelodysplasia and aplastic anaemia and this translated into reduced incidences of infection in a randomised study with GM-CSF. They also increase the leucocyte count in patients with AIDS and allow the safer administration of AZT and gancyclovir to this group.

From the current literature, the rational prescribing of haemopoietic growth factors would limit their use in oncology to giving G-CSF after standard dose chemotherapy which is delayed or dose-reduced because of neutropenia (in curable malignancies). G-or GM-CSF may be used after bone marrow tranplantation and to allow collection of peripheral stem cells. They may both also be of value for patients with AIDS, myelodysplasia or aplastic anaemia. Further data is required before their routine use in other situations can be recommended.

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TREATMENT OF EARLY CERVICAL CANCER
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Definition : Using the FIGO classification for carcinomas of the uterine cervix, limited disease is defined as tumors stage I and II ; stages III and IV being considered as advanced tumors. Is this subdivision into two categories sufficient for therapeutic decisions ? Is it absolutely necessary, or always possible, to take into account all known prognostic factors in order to give each patient optimal individualised treatment ?

Prognostic factors : Clinical prognostic factors used for decades are : tumor stage, tumor volume, local extension, nodal involvement, performance status, age... If available, nowadays the following biological criteria can be added to help the decision : pathological differentiation, flow cytogenetic analysis (cellular kinetics), oncogene expression, intrinsic radiosensitivity (if tested by BUDR or in vitro by SF 2 by determination...), and patient related characters such as heamoglobin level, vascular status, blood pressure...
Our presentation will be divided into two questionable steps : first, how can we establish these different prognostic factors -(examination, diagnostic imaging, laparoscopy, laboratory tests..) and secondly, how can they serve to modulate treatment protocol?

Treatment : If in general, locally advanced diseases of cervical carcinoma are treated by radiation, sometimes combined with chemotherapy, radiosensitizers or rarely with surgery, different treatment regimens can be indicated for early cervical cancer. We will present successively how surgery, radiation therapy or combination of both, might treat these patients, and how these different therapeutical approaches can take into account the established prognostic factors. The different procedures will be discussed separately including treatment protocol and technical aspects. For surgery : different types from limited procedures with conservative approach including laparoscopic management to radical extended surgery including paraortic lymphadenectomy will be described. Special attention will be paid to radiation therapy : external radiotherapy (volume, total dose, fractionation...) and brachytherapy with a particular focus on the clinical and biological aspects of low and high dose rates ; some recommendations or practical guidelines for the use of new dose rates will be emphasized. To conclude this part, the international recommendations for reporting radiation treatment parameters will be reviewed and evaluated.

Results : An overview of the largest series published, will give an idea of the advantages and disadvantages of the different therapeutic approaches, but the most important problem that arise from literature, is to have a common language ; without this common language for reporting patients staging, tumor and node status, or other used prognostic factors, treatment datas, results with different survival rate and morbidity (international complications glossary), no comparison is possible. We will try to define some rules to express these different datas to be able to compare and to make the best treatment choice.

Conclusion : With a 5 yr survival for early cervical cancer varying from 100% to 50 %, we can conclude that this patient population is compound of a very heterogeneous group of disease. The challenge is to select patients, according to the possible prognostic factors available, in order to optimize and individualize each treatment.

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PREOPERATIVE STAGING AND BIOPSY IN SOLID TUMORS: CONCEPT AND PRACTICE

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Preoperative biopsies in cancer patients aim at establishing a cytological or histological diagnosis. Complemented by preoperative staging treatment options can better be defined. Biopsy - and staging procedures take full advantage of the most sophisticated imaging techniques.
Preoperative staging may serve the following purposes:

- to estimate the prognosis and to select patients for individual treatment procedures
- to determine the choice of increasingly multidisciplinary treatment (extent and type of surgery, choice and timing of any adjuvant therapy)
- to compare results of different therapy programs
- to facilitate the preoperative discussion with patients

Typical staging procedures, their benefits and risks will be discussed.

Practical aspects of staging for an individual patient must be governed not only by the state of the art, general status and age but also by estimating the risk (low morbidity, zero mortality) and benefit of any particular staging procedure in each cancer case. Common sense will lead to an individually adapted solution.

Outlook: Present staging systems are based on the anatomical extent of a disease; but cancer represents rather a biological than a anatomic entity. The more research is focused on biological variables of tumors the more the prognosis will probably be determined by this functional markers. Thus the anatomical staging systems will be complemented by the biological staging variables for a more accurate prognosis of an individual malignant disease.