1. The genetic studies have identified subgroups at high risk of developing the disease creating the premises for programs of targeted chemoprevention.
2. Endocrine modulators and other active principles like retinoids have shown to be effective in reducing breast cancer incidence in specific subgroups of patients.
3. New developments in imaging procedures have made possible the detection of very early carcinomas greatly increasing the curability rates.
4. The analysis of the genetic profile of the cancer cells will be fundamental for prognostic evaluation and to assess the likelihood of response to medical treatments.
5. More and more non palpable tumours will be identified and destructed. Radio guided techniques to remove those occult lesions are now available.
6. Mastectomy is abandoned in favor of breast conservative treatments.
7. Thank to the Sentinel Node Biopsy procedure, the dissection of regional lymph nodes will be limited to patients with positive nodes.
8. Radiotherapy fields are being progressively reduced and partial breast irradiation is becoming a realistic perspective for the future.
9. Systemic treatments will be decided mainly according to the prediction of response to specific endocrine or chemical drugs.
10. New types of drugs built to meet specific biomolecular targets, expressed by mutated genes, are appearing as a result of the postgenomic research.
11. The cancer “stem cells” concept will open new roads in treatment.
12. TNM classification is being deeply modified.

All these new facts are at the root of dramatic changes in paradigms for prevention, detection and treatment of breast cancer. The main shift refers to the progressive awareness of the importance of quality of life, which is changing the traditional approach based on the “maximum tolerated treatment” to the “minimum effective treatment”. This new trend has led to limited surgery (instead of mutilating operations), more targeted radiotherapy (instead of large field involving the regional nodes), less aggressive chemotherapy (instead of the high dose approach). This new trend will motivate more women to participate in early detection programmes, which in turn will lead to the reduction of mortality rates.

Scientific Symposium (Mon, 26 Sep, 14:45−16:45) **Contributors to Better Survival in Colorectal Cancer**

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The Contribution of Evidence Based Guidelines and Compliance to Colon Cancer Cancer Survival

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Evidence based guidelines have played an ever increasing role in the practice of medicine over the last thirty years. National guidance for the management of colorectal cancer (either comprehensive guidance for all aspects of the condition from diagnosis to terminal care, or specific to a particular problem such as liver limited metastatic disease) has existed in many countries for the last fifteen or so years. But has the provision of such guidance led to any improvement in outcomes?

Overall across the breadth of medicine, the evidence suggests that the introduction of guidance does lead to improvement in outcome in over ninety per cent of cases [1]. However, the methodology and degree of rigor applied to the methodology in the creation and introduction of such guidelines is very variable, and there are many models of methodology with which guidelines can be constructed. Furthermore the size of outcome improvement following the introduction of guidelines varies widely.

Another problem in measuring the impact of the implementation of guidelines in oncology is the coincidence of the guideline publication with a simultaneous major breakthrough in disease detection or therapy. Furthermore, implementation and audit of outcomes of guideline recommendations may vary considerably at the local level.

The presentation will review the impact of a number of major national guidelines for the management of colon cancer from the author’s perspective as Chair the National Institute of Clinical Excellence’s colorectal cancer guideline development group.

References

[1] Grimshaw JA and Russell IT. Lancet 1993; 342: 1317−22

318 INVITED

Better Survival due to Improved Staging in Colon Cancer. the Sentinel Node Reappraised

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Background: The value of the sentinel lymph node (SLN) procedure in colon cancer patients remains a matter of great debate. The objective of this systematic review is to summarize the potential advantages of SLN procedure in colon cancer patients particularly focussing on the identification rate and sensitivity of the SLN procedure as well as on upstaging and on the possible impact on outcome.

Methods: A systematic review of the literature was performed since the first use of the SLN procedure in colon cancer patient in 1997 up to now. This review therefore represents a synthesis of the most relevant data regarding SLN procedure in colon cancer patients including data from our Swiss multicenter study.

Results: There are only a few prospective, multicenter studies − including one randomized controlled trial − in the literature. In the hand of experienced surgical oncologists, the SLN identification rate is close to 100% and the sensitivity around 85%. However, these rates are lower early in the learning curve. There is no universally accepted standardization of the SLN procedure (e.g., in vivo vs. ex vivo tracer injection; type of tracer used, amount of tracer injected, defined learning curve for the procedure). Due to in-depth analysis of the SLN (ultrastaging), small nodal tumour infiltrates are found in a relevant proportion of patients initially classified as node negative; upstaging rates around 15% are published in the literature.

Conclusions: The SLN procedure for colon cancer has good identification and accuracy rates, which further improve with increasing experience. Patients remaining node negative after ultrastaging of the SLN represent a subgroup of colon cancer patients with excellent prognosis. Most importantly, the SLN procedure results in an upstaging of 15% of node negative patients. The potential advantage of performing the SLN procedure appears to be particularly important in these patients as they may benefit from adjuvant therapy, which consequently may result in better disease-free and overall survival.

In the future, it is crucial to further explore different strategies to improve either lymph node staging (e.g. by One-Step Nucleic Acid Amplification [OSNA] of lymph nodes) or the SLN procedure in colon cancer patients (e.g. by using an intraoperative near-infrared fluorescence imaging system [FLARE]).

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Neoadjuvant Treatment in Colon Cancer

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With the advent of more active combination chemotherapy (CT) than just single agent FU, resections of unresectable liver metastases (mets) have been reported. Since then disease downstaging has become a relevant endpoint of “conversion therapy”. “Neoadjuvant CT” of resectable mets was also investigated, within the frame of a “perioperative strategy”. In addition to unresectable and resectable mets, “potentially resectable” mets are usually considered a third category, although CT used in this setting should be regarded as conversion therapy. Conversion therapy is most challenging, since it is directed against macroscopic mets with the aim of shrinking them or altering their structure, whereas perioperative therapy is directed against micrometastases. A recent systematic review of 23 neoadjuvant CT trials on resectable colorectal liver mets reported a median RR of 64%, with R0 resection rate of 93%, and median DFS of 21 months. In the only phase III study available, these figures dropped to 43%, 87% and 19 months, respectively. These studies do not allow a conclusion on the optimal neoadjuvant CT for resectable mets, because the phase III investigated FOLFOX CT vs surgery alone, and the other studies are single arm phase II. In nonresectable mets the Tournigand study provide a randomized comparison between FOLFOX and FOLFIRI reporting a higher RR for FOLFOX with corresponding liver mets R0 resection rate of 22% compared to 9% with FOLFIRI. This conversion rate of FOLFOX was confirmed (33% on 43 patients) in a phase II study. In a randomized phase III trial, Falcone et al. demonstrated an increased RR (66% vs 41%) and R0 resection rate (36% vs 12% in patients with liver only mets) for the triplet regimen FOLFOXIRI compared with FOLFIRI. Further increased RR is reported with the addition of monoclonal antibodies to standard CT. At least 4 studies showed consistent improvements in RR (ranging from 59% to 79%) with addition of Cetuximab to CT. In the phase III CRYSTAL trial the rate of R0 liver resection increased from 1.5% with CT only to