

Detailed imaging of areas of interest on microscopic level is now possible by the use of confocal microscopes incorporated in the endoscope or in small mini probes.

Early neoplastic lesions can effectively be treated by focal removal using endoscopic mucosal resection (EMR). Until recently, the EMR-cap was the most common technique for this purpose but with multi-band mucosectomy an easier endoscopic resection technique has come available.

After focal removal of neoplastic lesions the remaining Barrett's segment remains at risk for further neoplastic progression. Additional treatment to remove this risk is therefore required. Complete endoscopic resection of the Barrett segment suffers from the high rate of the stenosis. A new endoscopic ablation technique, known as radiofrequency ablation may surpass this problem. Recent studies suggest that this technique is highly effective, not associated with severe complications, or esophageal stenosis and results in a complete endoscopic and histological removal of the whole Barrett's segment.

The combination of state of the art endoscopic imaging and these new endoscopic treatment modalities will result in the effective endoscopic management of patients with early Barrett's neoplasia and should be incorporated in guidelines as well as training programs.

Special Session (Thu, 24 Sep, 11:15–12:15) New approaches for evidence generation of novel radiation technologies

333 INVITED Development and assessment of novel radiation techniques – a medical physics perspective

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The medical physics community has a long and successful history in the development and advancement of novel methods for the detection and treatment of disease. These advancements are typically motivated by the desire to improve the likelihood of managing the disease and/or to minimize any therapy-induced toxicity. While this desire attracts bright young physicists, engineers, and computer scientists to the field, it is not sufficient on its own to bring about any substantive change in clinical practice. Such change needs the maturation of specific technical, physical or biological challenges that can be articulated and formulated. The development of such 'validated problem sets' is an important precursor to advancing new treatment techniques – it provides the foundation for the research and development process and assures the developments will contribute to clinical care in a meaningful way. Given the background of the medical physics community, these individuals are able to bring a wide variety of novel technologies to address the challenges. Over the past 10 years, the field of oncology has seen an explosion in the number of technological advances that are employed in the treatment of cancer – particularly in the application of radiation therapy. The role of the medical physicist in these activities is not strictly defined, but focuses on methods of reducing uncertainty, increasing conformality, and assuring safety. Furthermore, it can be anticipated that the rate of novel technology development on these topics will increase, including the development of minimally invasive surgery, robotic interventions, and the development of particle therapy. With the development of novel diagnostic or therapeutic approaches, the question of cost and benefit will and should arise. One may ask, 'What is the role of the medical physicist in this activity?' Clearly, as a functioning member of the health care profession, medical physicists have an obligation in this regard as well. This could be seen as placing the medical physicist in the potentially conflicted role of both advancing technology for the benefit of society, as well as, engaging in its broad use and evaluation. However, the medical physicist needs to rise above this simplistic presentation of a more complex conflict. The solution to this dilemma is found in our training as physicists and engineers. We must focus on the clear formulation of the problem we are seeking to address and emphasize the importance of being rigorous in our evaluation and comparison of arising technologies. In this presentation, the challenge of evaluating technological developments in radiation therapy will be discussed in an 'engineering paradigm' that can be contrasted with conventional 'evidenced-based' approaches.

Special Session (Thu, 24 Sep, 11:15–12:15) Future trends and EONS projects

334 INVITED Prostate cancer and supportive care: European training needs analysis

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Prostate cancer is increasing in incidence and will continue to place a significant burden on the health care systems of all developed countries. In Europe it is estimated that more than 300,000 new cases were diagnosed in 2006 and that this number will continue to rise. Approximately 20,000 men are being diagnosed with prostate cancer in the UK alone each year [1] and it is expected that over a third will die of the disease. Across Europe there are currently more than two million men living with prostate cancer and a man has a 1 in 12 lifetime risk of being diagnosed with prostate cancer as a result of clinical symptoms, signs or PSA testing [2]. It was only in 2001, however, that the European Association of Urology issued guidelines on the medical management of prostate cancer and there are still no known consensus statement of the nursing management or supportive care needs of these patients across Europe [2]. Research into the role of nursing or their training needs is also lacking although some evidence exists from the UK that men with prostate cancer feel that information and co-ordination of care could be improved [3]. The current PSA (Providing Supportive care & Advice) project has four phases:

1. To identify training priorities of oncology/urology nurses from 7 European countries (Denmark, France, Spain, Netherlands, Turkey, Sweden, Ireland and United Kingdom) using an Internet survey approach. The target is to obtain 100 responses from each country.
2. To survey a sample of junior medical staff using a similar method and compare their learning needs with those of the nurses.
3. To compare the nurses and doctors views with the expressed views of a sample of men living with prostate cancer.
4. To design and evaluate an education package on the topic of prostate cancer care in response to the findings.

This presentation will provide information on data from obtained form phase 1 and discuss the contextual challenges and benefits of this type of educational needs assessment [4]. The future role of EONS in advancing professional cancer education across Europe will also be discussed.

References

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- [4] Kelly D, Gould D, White I. Modernising cancer & palliative care education: insights from one cancer network. *European Journal of Oncology Nursing* 2006;10.

335 INVITED What does the future cancer workforce need to look like?

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Future cancer health services have a difficult balancing act, firstly between increasing demands for cancer care and diversity of provision; secondly between the need to respond to peoples cancer health needs during therapy but also to promote health and provide rehabilitation for the increasing number of cancer survivors. There are a number of challenges we face in developing the nursing workforce, from the increasing age of the EU population, projected shortfall in number of nurses and skills and knowledge to provide such nursing in the future diversity of cancer health care provision.

Epidemiological projections within the EU suggest that the Increasing life span of the older population will impact on cancer incidence. It is predicted that between 2008 and 2060 the population of the EU aged over 65 is projected to increase by 66.9 million. Cancer as a disease predominantly of older age is therefore likely to increase in incidence and put pressure on existing health services. Issues such as late detection of cancer in older age, toxicity differences, co morbidity and supportive care requirements mean that nurses need to be more aware of age related factors and have a broader knowledge of co morbidity. Workforce issues in the support of informal carers, as well as nurses in general and community settings will need to be addressed if we are to maintain quality cancer care. A further effect of the changing demographic is that there will also be fewer