Human Papillomavirus-Related Diseases and Prevention with Vaccination

Marjetka Uršič Vrščaj

Human papillomavirus (HPV) is an extremely prevalent sexually transmited infection that is typically acquired soon after the onset of sexual activity. The burden of HPV-related malignant and nonmalignant disease is high in women and men. High-risk or oncogenic types of HPV cause cervical, vaginal, and vulvar vancer in women. These types have also been shown to cause penile cancer in men and a substantial proportion of oropharingeal and anal cancer in women and men. Low-risk types of HPV cause anogenital warts.

Virus-like particle-based vaccines have recently been developed to prevent the infection with two cancer-associated HPV genotypes (HPV 16, HPV 18) and have been ~ 95% effective in preventing HPV-associated disease caused by genotypes in virus-naive subjects. The prophylactic vaccines are not therapeutic for the already present infection. HPV prophylactic vaccines are the first vaccines designed to prevent a human cancer.

Screeening for Hepatitis B Infection and Prevention of its Reactivation in Cancer Patients under Sytemic Therapy - Current Clinical Recommendations

Tanja Čufer, Tanja Južnič, Boštjan Šeruga, Nina Turnšek, Brigita Gregorič and Mojca Matičič

As a supplement to the September 2010 issue, the Slovenian Medical Journal published Slovenian national guidelines for prevention of hepatitis B reactivation in the patients undergoing immunosuppressive treatment. These guidelines, based on the orientations provided by two international organizations for liver cancer prevention, the European EASL and the American AASLD, suggest screening for hepatitis B infection (HBV) in all patients to whom immunosuppressive treatment, including also systemic cancer treatment, is indicated. In cases where a latent infection is determined, application of antiviral therapy is suggested. In several individual studies as well as in a meta-analysis of 11 studies, antiviral therapy reduced the risk of hepatitis B reactivation and mortality due to it, while there is no proof of a significant impact on the overall survival. Within almost the same timeframe, several provisional clinical opinions on screening and prevention of reactivation of hepatitis B in cancer patients receiving cytostatic treatment were published by the American Society for Clinical Oncology (ASCO); they all promote the use of screening for HBV infection only in the group of cancer patients who show a high risk for chronic HBV infection and in all patients to whom highly immunosuppressive therapies, such as high-dose chemotherapy with bone marrow transplantation or treatment of lymphoma patients with rituximab, are indicated. ASCO does not suggest prophylactic treatment with lamivudin in all patients with latent infection, but promotes an individual approach to treatment based on cost-benefit analysis in each individual patient. These two publications and their not entirely unanimous guidelines are confronting the present Slovenian oncologists with the dilemma which of the current approaches to patient treatment is optimal in everyday clinical practice. To resolve these issues, a group of specialists in the field of medical oncology and infectology conducted a round table discussion in November 2010. The conclusions and proposals derived from this meeting are presented in this article. In order to obtain an even more clear statement on whether screening for HBV infection should be used in all cancer patients receiving systemic therapy as well as on the safety and efficiency of antivirus treatment in latent HBV carriers, additional data gathered in the frame of prospective clinical trials are needed. The decision was made to plan and conduct a prospective clinical trial in Slovenia, which will provide us with the data on the occurrence of chronic HBV carriers in the current population of patients with lymphoma and solid cancer patients as well as with the answers on the safety and efficiency of preemptive antivirus treatment or chemoprophylaxis in our patients. On the basis of the findings of this widely set out prospective trial and taking into account additional data obtained in the frame of international trials already under way, we will be able to define more precise and clear guidelines on screening and prevention of hepatitis B reactivation in Slovenian cancer patients receiving systemic therapy.

Precise Irradiation of Locally Advanced High-Risk Prostate Cancer

Daša Grabec, Uroš Gačnik and Borut Kragelj

In radiotherapy of prostate cancer, it is very important to conform the irradiation fields as much as possible to target volume, i.e. to position the patient as accurately as possible, thereby allowing smaller safety margin. In this way, an optimal shielding for the organs at risk may be provided at a prescribed dose to the target volume.
Image-guided radiotherapy (IGRT) allows the reduction of the safety margin that accounts for the daily prostate movements. After the translation of prostate is subtracted, only the prostate rotation is to be considered.
With the analysis of daily prostate rotation between the fractions of the first part of radiotherapy course, the safety margin can be optimized. Optimal size of the safety margin around the prostate may be used for the second and third part of the radiotherapy course and the radiotherapy plan may be adaped accordingly.

Intrathecal Administration of trastuzumab and rituximab

Samo Rožman, Simona Borštnar and Barbara Jezeršek Novaković

Neoplastic meningitis is a serious complication of malignant disease. In spite of low incidence, its frequency is increasing. This is believed to be due to better cancer patient survival and improved diagnostic procedures. Treatment of neoplastic meningitis usually consists of systemic and intrathecal therapy along with radiotherapy of central nervous system. Trastuzumab and rituximab are monoclonal antibodies that significantly improved the outcome of breast cancer and non-Hodgkin lymphoma patients. While the two monoclonal antibodies are effective agents for their respective disease states, their efficacy is poor in the treatment of neoplastic meningitis as they are unable to cross the blood-brain barrier. This is a review of evidence for the potential use of intrathecal trastuzumab and rituximab.

Cervical Cytology Reporting – Classification According to Bethesda System

Ana Pogačnik

The main goal of Bethesda classification was to develop a system for reporting Pap smears that would communicate the cytology interpretation to the clinician in a clear and relevant fashion. In Slovenia, a new classification, which closely approximated Bethesda classification, was introduced in 2006. In 2011, we decided to fully accept Bethesda clasification. Specimen adequacy is now evaluated as satisfactory or unsatisfactory for evaluation, with the specification why the specimen cannot be examined. If smear is negative for epithelial lesion, it is labeled either as normal smear or non-neoplastic disorder. Pathologic changes are devided into epithelial cell abnormalities: squamous and glandular. Among squamous epithelial cell abnormalities, the most problematic and controversial categories are atypical squamous cells of undetermined significance (ASC-US) and atypical squamous cells cannot exclude high-grade sqamous intraepithelial lesion (ASC-H) . Squamous intraepithelial lesions (SIL) in Bethesda system are devided into low-grade intraepithelial lesion (LSIL), high-grade intraepithelial lesion (HSIL) and squamous carcinoma. Glandular cell abnormalities are devided into four categories: atypical glandular cell NOS, atypical glandular cells favour neoplastic, endocervical adenocarcinoma in situ, and adenocarcinoma.

Prevention, Detection and Treatment of Extravasation of Cytotoxic Agents

Marjana Bernot, Marijana Fortuna and Simona Borštnar

Extravasation is a rare but very unpleasant complication of systemic cancer treatment and could be the cause of severe early and delayed consequences for the patient. Extravasation warrants special attention from the healthcare professionals involved in administering intravenous medications. The article summarizes and explains the most recent recommendations on extravasation in the clinical setting - from prevention and recognition to possible treatments with antidotes.

Care of Patients at the End of Life

Jernej Benedik

Care of patients nearing the end of life is primarily aimed at providing the best possible quality of life to the terminally ill patient and offering support to his family members. To assure appropriate help and to offer it in time, the length of patient's survival should be assessed. Non-palliative approach to the care of patient nearing the end of life is a path that leads to medical futility; it only increases the patient's pain and suffering. The treatment of symptoms is similar to that in early stages of palliative care. A special challenge in the care of patients nearing the end of life is the choice of proper drug therapy. The care should be carried on also after the patient's death by completing the formalities required in the event of death and by giving support to the grieving family members.

Cardiac Damage in Patients Treated for Hodgkin's Disease with Radiotherapy and Chemotherapy: Case Report

Peter Rakovec, Lorna Zadravec Zaletel, Dunja Latifić Jasnič and Berta Jereb

Cardiac damage can develop many years after treatment of Hodgkin's disease with irradiation and chemotherapy. In the presented case, we found cardiac damage 25 years after treatment. In the last decade, it has been severily escalating. The patient was diagnosed with the diastolic dysfunction of the left ventricle, fibrosis of the aortic and mitral valves and thickening of the pericardium. In childhood cancer survivors, lifelong follow-up is necessary. The majority of cardiac late effects can be discovered with non invasive ultrasound examination.

SLORA – Website with Epidemiological Data on Cancer

Vesna Zadnik and Maja Primic Žakelj

Cancer registration in Slovenia has a long tradition. The Cancer Registry of the Republic of Slovenia was founded at the Institute of Oncology Ljubljana in 1950; it is one of the oldest population-based cancer registries in Europe. Cancer incidence, prevalence and survival data are collected and published for more than 60 years and traditionally distributed to users in the form of printed annual reports and technical papers. Last year, a novelty was introduced in the field of data dissemination and presentation: an interactive website called SLORA was activated on the web address www.slora.si.
The principle objective of the SLORA interactive web portal is to provide public health and clinical professionals, health care organizations, civil society associations, the media and general public with a simple but complete up-to-date overview of cancer burden in Slovenia, EU and worldwide. In addition, it is aimed to offer some additional content and credible information on the risk factors and possible ways to prevent cancer. This information is important for planning and evaluation of the effectiveness of oncological primary and secondary prevention, diagnosis, treatment, rehabilitation and palliative care, as well as for planning the resources (personnel, medical equipment, bed capacity …), and for clinical and epidemiological research.