

**OP 25**

UDC: 616.3-006:616-036.22(497.11 Serbia)

**Epidemiology of malignant illnesses within gastrointestinal tract**

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There are more than 30 million people worldwide suffering from cancer nowadays. The number of people with newly discovered cancer with different locations rises every year, and now is at level of about 12 million people per year. It is estimated that the number of newly discovered cases in 2020 will be approximately 20 million. Malignant illnesses are one of the most frequent causes of death worldwide, and gastrointestinal tract is the third most frequent locations of malignant tumors. The tumors of colon, stomach, pancreas, liver, and esophagus are the most frequent, whereas tumors of gall bladder and small intestine are less frequent. The objective of the paper is presentation of epidemiological characteristics of malignant illnesses within gastrointestinal tract and their importance in Serbia. The method implied the analysis of the epidemiological situation with malignant illnesses within gastrointestinal tract, according to the data on incidence and death rate due to those illnesses. Malignant illnesses within gastrointestinal tract are at the third place in Serbia, with incidence of about 6800 persons per year. Considering locations, the most frequent are colon tumors (58%), followed by stomach tumors (20%), pancreas tumors (13%), and liver tumors (9.5%). Incidence rates in Serbia are among lower European rates, but they increase constantly. Most of the patients are detected in later phase, when treatment is less successful. For some locations, there are good measures for primary prevention (such as for liver cancer), whereas secondary prevention, like early detection and screening (in case of colon cancer, for instance), is more important for other locations. Colon cancer is one of the most important solid tumors. The reason for this is not only its incidence (about 4000 persons in Serbia per year), but also the possibility of healing, which is greater than for all other solid tumors within gastrointestinal tract taken together. Analysis of epidemiological situation, with application of proper primary and secondary prevention measures and adequate treatment of malignant illnesses within gastrointestinal tract, are the prerequisite for decreasing the incidence and mortality due to those illnesses.

**Key words:** Digestive System Neoplasms; Epidemiology; Serbia**OP 26**

UDC: 616.351:616-072:614.253.5

**Medical nurses within the endoscopic team during diagnosis and patient's treatment with post-irradiation proctitis**

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Proctitis is an inflammatory process of the inner layer of the rectal wall. It occurs because of radiotherapy in 75% of patients with malignant diseases: prostate, ovary, uterine cervix, uterine corpus, and rectum. A diagnostic endoscopic procedure (rectoscopy and flexible sigmoidoscopy) presents a diagnostic method for patients with post-irradiation proctitis. For now, there are no standardized treatment protocols, and the result of therapy is often unpredictable. The aim of this paper was to point out the important role of the nurse in performing endoscopic methods in diagnosis and treatment of patients with post-irradiation proctitis. The role of nurses is to give all the needed information to the patient, to make psycho-physical preparation, preparation for rectoscopy and flexible sigmoidoscopy apparatus, to assist during a recto-sigmoidoscopy, to send a biopsy sample to histopathological analysis and to take care of the patient after the intervention. The nurse has a very responsible role in that diagnostic – endoscopic team caring about patients during their treatment with post-irradiation complications of radiotherapy. Endoscopy is a „gold standard” in diagnosis, therapy evaluation, and treatment of patients with post-irradiation proctitis.

**Key words:** Nurse`s Role; Sigmoidoscopy; Proctoscopy; Radiation Injuries; Proctitis



## OP 27

UDC: 616.329-006:615.38:615-085.1:341.18

### Unwanted effects during the combined chemoradiotherapy at patients with cancer of esophagus – health care

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Cancer of esophagus is a relatively rare disease. The most common causes are genetic predisposition and chronic irritation of esophageal mucosis. The main symptoms of this disease are difficult swallowing, loss of appetite, loss in body weight, pain behind sternum, hoarseness, and cough. The diagnosis is made with different diagnostic procedures, such as esophagographic examination, esophagoscopy examination with biopsy, and CT of thoracic cage. In case of cancer, which cannot be operated, the best treatment is a combined chemoradiotherapy, and after that, surgical treatment is performed. A combined chemoradiotherapy can cause hematological and non-hematological unwanted effects.

Our aim was to show the importance of prompt recognizing and treating acute unwanted effects, in health care of patients with cancer of esophagus, during the chemoradiotherapy.

In the period from August 2006 to September 2009, in IORS Belgrade, 52 patients of different age with esophagus cancer were treated with chemoradiotherapy. Chemoradiotherapy was carried out simultaneously. Cisplatin was applied at days 1, 15, 30, 5FU and leucovorin at days 1, 12, 15, 16, 30, and 31. Radiotherapy began at day 3 of chemotherapy with TD 50 Gy in 28 fractions. Unwanted effects during the treatment were: dysphagia – 38 patients, anemia – 38 patients, leukopenia – 25 patients, thrombocytopenia – 12 patients, nausea-11 patients, pain – 9 patients, febrile neutropenia – 7 patients, stomatitis – 4 patients, thrombosis of profound veins – 4 patients, vomiting – 1 patient, diarrhea – 1 patient. Nurses should promptly recognize the unwanted effects of therapy and make some interventions to improve the quality of life of patients with esophagus cancer.

**Key words:** Esophageal Neoplasms; Radiotherapy; Antineoplastic Combined Chemotherapy Protocols; Drug Therapy+adverse effects

## OP 28

UDC: 616.33-006:612.39:614.253.5

### Enteral nutrition via nutritive tubes after total gastrectomy in patients with gastric carcinoma

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Enteral nutrition (EN) is a term used to comprise all forms of food intake, including oral way or nutritional tubes placed on different levels of gastrointestinal tract (GIT). EN via feeding tubes is applied in patients unable to eat or when per oral way is contraindicated. In patients with total gastrectomy due to gastric cancer, continuity of GIT is provided with esophageal-jejunal anastomosis. Traditionally, in these patients oral feeding is contraindicated until full bowel motility is achieved. Nutritional support is provided by parenteral way and fasting can last even 10 or more days. Recently, the intraoperative placement of nutritional naso-jejunal tubes under the anastomosis has provided EN on a first postoperative day. Early EN, by individually calculated requirement, significantly improves recovery of patients at high risk due to natural intestinal absorption via GIT. Also, it diminishes parenteral requirements and shortens hospitalization in surgical intensive care (SIC) unit. The aim of this study was to present specificity of nursing interventions in application and maintenance of naso-jejunal tubes after total gastrectomy due to gastric cancer. After total gastrectomy and positioning of naso-jejunal tubes, patients were admitted to SIC unit. Type, volume, and flow speed of nutritional formula was calculated by anesthesiologist. Nursing interventions in appliance of EN are: tube position checking, check the transience of tube by flushing sterile normal saline, preparation of nutritional solution, connection to enteric pump, adjustment of flow speed, tube flushing after application of per oral medicaments, continuing monitoring, and recording. Nausea, vomiting, diarrhea, constipation, reflux, pulmonary aspiration, and hypoglycemia are most common side effects and complications of EN via feeding tubes. We have analyzed the specificity of nursing interventions considering medical care process, recognition, and recording of side effects and complications of EN. EN via feeding tubes in early postoperative course after total gastrectomy made significant improvement in fast recovery of patients with gastric cancer. Choice of nutrition formula and its adequate appliance are prerequisite of fast rehabilitation and forehand adjuvant oncology treatment. Specificities of nursing interventions are regarded to continuing monitoring of other parameters of surgical patients care and therefore require well trained and experienced team.

**Key words:** Enteral Nutrition; Stomach Neoplasms; Gastrectomy; Nursing; Nurse's Role



## OP 29

UDC: 616.34-008.3:371.64:316.6

### Preparing the patient for life with stoma

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The aim of education of stoma patients is to help them understand the feelings for upcoming surgical procedure that includes stoma formation. The process of adjusting the patient for life with stoma is time consuming. It is essential to build up patient's self-confidence and to include him/her in everyday activities as soon as possible. The preparation of patients for life with stoma has two segments: psychological preparation and rehabilitation. Psychological preparation begins even before operation and continues in the period of rehabilitation. First of all, patient should be informed on current health status and about forthcoming surgical procedures. It's also very important to inform family members on these details, in order for them to provide necessary help and support to the patient. Rehabilitation is divided in two segments: (a) psychological and (b) physical. Psychological rehabilitation is started by stoma therapist as soon as patient returns from operating theatre. Physical rehabilitation is commenced when we are certain that the patient is ready to learn the skills needed for his independent life and to confront with future life with stoma.

**Key words:** Patient Education as Topic; Surgical Stomas; Adaptation, Psychological; Activities of Daily Living

## OP 30

UDC: 616.348-006:614.253.5:371.64

### Education of patients with colostomy

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Colostomy, or an artificially created anus, represents an artificial opening on some part of intestine for evacuation of fecal masses and gases with no willing control by patients or sphincter mechanism participation. Depending on the period of their use colostomies can be temporary or permanent. Adaptation of patients to life with colostomy is not easy and fast process. Beside the doctor and therapist important part of the team is the nurse both in education and care of patients with colostomy. Based on hospital registry of Institute of Oncology and Radiology of Serbia, in Belgrade the number of newly registered patients with colorectal carcinoma during the last year was 485 patients (10% of all patients), from which 43 underwent surgical procedure-colostomy.

Our aim was to present standardized nurse interventions in education of patients with colostomy. Documentation used: Protocol of health care of Institute of Oncology and Radiology in Belgrade and nurse documentation. Through application of standardized nurse activities, involving education and care of patients with colostomy, their adaptations to new conditions of life is faster and less traumatic.

**Key words:** Colostomy; Nursing; Patient Education as Topic; Nurse`s Role; Reference Standards



## OP 31

UDC: 616.348-006:616.351-006:614.44:577.21

### Importance of KRAS gene mutations detection in patients with metastatic colorectal carcinoma

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Screening for the KRAS mutations, necessary prior Erbitux treatment of patients with metastatic colorectal carcinoma (mCRC), have been performed at Institute for oncology and radiology of Serbia for more than one year and half. KRAS plays a key role in the EGFR signaling pathway, frequently altered in tumor cells. Mutations in the KRAS oncogene are frequently found in human cancers; 30-40% of patients diagnosed with metastatic colorectal cancer harbor mutations in the KRAS gene. The presence of these mutations correlates with a lack of response to certain EGFR inhibitor therapies such as Erbitux. Our aim was detection of KRAS gene mutations in patients with mCRC, before introduction of Erbitux. DNA extraction was done from paraffin embedded tissue, using DNA FFPE Tissue kit. KRAS gene mutations were detected by ARMS-Scorpions Real-Time PCR. This method is highly sensitive, detects seven KRAS mutations in codons 12 and 13, and can detect 1% of mutant in a background of wild type (wt) genomic DNA. Detection of the mutations was performed in 184 patients with mCRC; 68 (37%) patients were harboring KRAS gene mutations. Patients with wild type (wt) were subjected to Erbitux treatment. Number of patients with mCRC, having KRAS gene mutations, is the same in our population as reported elsewhere. The development of personalized medicine and such kind of molecular-diagnostic tests is of the highest importance for the patient, making possible to achieve the best medical outcome with a minor side effects.

**Key words:** Colorectal Neoplasms; Neoplasm Metastasis; Genes, ras; Antineoplastic Agents; Receptor, Epidermal Growth Factor; Antibodies, Monoclonal; Polymerase Chain Reaction

## PP 32

UDC: 612.323.5:616-089.8:614.243.5

### Duties of an operating room nurse during the total gastrectomy procedures

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Total gastrectomy is a procedure, which implies complete removal of stomach. The continuity of gastrointestinal tract is maintained by the primary esophagojejunal anastomosis. The duties of the operating room nurses, as members of a surgical team, are standardized and require a high level of professionalism with the absolute care of keeping aseptic environment. Our aim was to present the activities of the operating room nurse during the total gastrectomy procedure. The activities of the operating room nurse include proper handling of surgical instruments during the surgical procedure, which adds up to the smoothness of the procedure. Following the strict procedures and fulfilling all the duties of the operating room nurse, minimizes the chances of making a mistake during the procedure, which leads to higher level of safety for the patients.

**Key words:** Gastrectomy; Surgical Procedures, Operative; Nurse's Role



## PP 33

UDC: 616-006:616-089.168:614.253.5

### Activities of the operative room nurse during the total pelvic exenteresis

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Total pelvic exenteresis (TPE) is a surgical procedure, which considers removal of all visceral pelvic organs, distal ends of all three tracts: genital, urinary and digestive, with the corresponding parts of perineum. It was developed as the only onco-specific procedure in malignancies that have not responded to the chemo- and radiotherapy. Our aim was to present the activities of the operative room (OR) nurse during the TPE. Activities of the OR nurse include: acceptance of patients to the OR; positioning of patients in Trendelenburg position; various procedures of the OR nurse during the operative procedure. The activities of the OR nurse during such an extensive surgical procedure are tremendously important. By maintaining high standards and all measures of aseptic work, patient's safety is lifted to higher standards leading to successful surgical procedure.

**Key words:** Pelvic Exenteration; Surgical Procedures, Operative; Patient Care Team; Nurse`s Role