frequent fractioned stools for the CAA group and soiled pads for the CP group. The scores evaluating the QoL general aspects (QLQC-30) were equivalent for CAA and PC. The specific score of QoL for rectal cancer was equivalent for the majority of aspects with only one worst QoL, for the defecation for the CAA group76 (24–100) versus PC group 90 (61–95).
Conclusions: These two salvage techniques give some very comparable results for the continence score and for the QoL. In case of very low rectal tumor, the choice between an intersphincteric resection, that gives the worst functional result of all CAA, and APR with a PC must be done more according to carcinologic(al) criteria than future functional or QoL results, since no major differences seemed to exist between these two salvage techniques.

1436 ORAL

Could surgical radiofrequency ablation of colorectal metastases stimulate dormant micrometastases?

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Background: After hepatectomy, quiescent hepatocytes replicate to restore the liver homeostasis. This process is also known to boost the growth rate of micrometastases sleeping in the remnant liver. Radiofrequency ablation (RFA) destroys mainly tumoral tissue with a small surrounding healthy liver margin. The aim of this study was to evaluate the serum pattern of cytokines involved in hepatic growth regulation after surgical RFA of colorectal metastases in order to evaluate the general inflammatory stress as well as the possible stimulation of dormant micrometastases.
Patients and Methods: Metastases of ten non consecutive patients were intraoperatively destroyed by RFA (Elektrotom®) without concomitant resection. A Pringle manoeuvre was performed in case of lesion more than 30 mm in size or in a paravascular location. Serum sampling were done at D-1, D0 +3 hrs, D1, D2, D3, D5, D7. IL6, TNFα, HGF, VEGF, bFGF, TGFβ1, CRP were assessed by ELISA technique. Livers sizes were measured pre and postoperatively.
Results: IL6 level reached a peak at 3 hours and stayed high during all the study at the opposite of TNFα which was undetectable as bFGF. HGF increased three times at D1 and then decreased until D7 where it was still twice its baseline level. VEGF level increased at D5. CRP was at a high level during all the study. Postoperative CT scan did not exhibit significant increase in liver sizes compared to preoperative assessment.
Conclusion: RFA induces a lower level of systemic inflammation than cryotherapy does. RFA does not lead to a clinically observable change in the liver volume. Nevertheless, it could not be eliminated that the changes in cytokines pattern should stimulate dormant metastases at the same level of risk than resection.

1437 ORAL

The trans-metastasis hepatectomy (with metastases preliminary ablated with radiofrequency): results of a 13-case study of colorectal cancer

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Background: Transmetastasis curative liver resection immediately following radiofrequency (RF) destruction is a new technique which allows to propose a curative approach to patients with bilateral unresectable liver metastases (LM), when the only possible future resection plane of a hepatectomy would pass through a LM unhappily sited in this plane. This technique consists in first ablating, using RF, the ill-sited LM, located in the plane of the future section line of hepatectomy, the only possible one for volumetric reason, and then performing the hepatectomy passing through this preliminary ablated LM.
Aim: The aim of this study is to report the feasibility and efficiency of this new approach, called Post-RF-Trans-Metastasis-Hepatectomy (PRFTMH).
Material and methods: Thirteen patients were treated with PRFTMPH between January 2000 and May 2004. Of them had a colorectal primary tumor. The mean number of LM per patient was 10.7.. Preoperative hypertrophy of the future remaining liver was obtained by selective portal vein embolization in 8 patients.
Results: Mortality was 7.6% (one death), and morbidity was 24%. No local recurrence on the site of PRTMPH was observed after a median follow-up of 19.4 months (range: 47–10), demonstrating the efficacy of this technique. All these patients except those who died postoperatively, are currently alive, and the median survival rate has not been reached yet, but is far greater than 20 months.
Conclusion: The PRFTMH is a new and safe technique, combining RF ablation and trans-RF-hepatectomy, which allows to propose a curative approach to some patients with non resectable bilateral LM. More numerous patients are required before to conclude on the positive impact of this new technique.

1438 ORAL

Sensitivity variations related to intectostobrachial nerve section during axillary surgery for the breast cancer

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Introduction: The complications of the surgery of axilla (e.g. pain, seroma formation, reduced arm function, anesthesia, hypo- and paresthesia in the axilla, numbness of the arm) appear due to section of the sensory intercostobrachial nerve (IBN), which is often sacrificed during an axillary clearance. This nerve damage may be a cause of significant discomfort in patients treated surgically for the carcinoma of the breast. The aim of this prospective study was to evaluate the advantage of preservation of IBN in order to diminish sensory symptoms.
Materials & Methods: The group of ninety-four patients undergoing axillary dissection for the carcinoma of the breast, hospitalised and operated at the Department of Surgery of Institute of Oncology and Radiology of Serbia (National Cancer Research Center) in Belgrade, in the period from April 2001-August 2002, was recruited to this study, and followed prospectively for the period of three months. According to the surgical interventions of IBN, we divided the patients into three different groups: in first group, the nerve is preserved; in second, the main trunk is preserved and peripheral branches are divided; in third group, the nerve is sectioned. Clinical testing to evaluate changes in tactile sensitivity and pain, using standard neurological methods, were conducted during the immediate postoperative period (4–7 days), after one month and after three months from the surgery. We used different statistical methods: chi-square test, factorial analysis and the means of percentage in order to evaluate these results.
Results: In this group of ninety-four patients, IBN has been preserved in 35 cases, while in 20 patients only peripheral branches have been sacrificed and in 39 of them, nerve has been sectioned. We found the greatest changes in sensitivity in the group of patients with the section of nerve trunk. In the group with section of peripheral branches of the nerve, we found the less intensive alterations. The minimal presence of pain, numbness and paresthesia, although also being presented, has been reported in the group with the preservation of the nerve. The incidence, intensity and the lasting of these changes, significantly increase with sacrifice of IBN ($p < 0.001$ by the chi-square test).
Conclusions: The IBN can usually be identified during an axillary clearance and preservation of this nerve does not appear to affect local recurrence The preservation of IBN during the axillary surgery for the carcinoma of the breast, is strongly recommended in cases where the nerve is not involved by lymph nodes, and where this preservation does not compromise a control of the disease from oncological point of view.

1439 ORAL

Stage migration in breast cancer after the introduction of The Sentinel Node Biopsy Technique – a population based study from the Danish Breast Cancer Cooperative Group (DBCG)

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Background: The sentinel lymph node biopsy technique (SLNB) has rapidly become the standard method in breast cancer patients for detecting metastasis to the axilla. With the technique serial sectioning and staining with immunochemistry in the examination of the sentinel lymph nodes suggests that 10–20% more patients have metastasis to ipsilateral axillary nodes.
Aim: The aim was to investigate if the introduction of SNLB increased the numbers of node positive patients in a population based study.
Methods: We compared a period before SLNB was introduced with a period after the method has become standard procedure in staging the

axilla. In three counties all new breast cancers among women age 70 or younger (n = 1913) were included in the study.
Information from the Danish Cancer Registry and DBCG were compared and missing data in the DBCG database was collected from the medical records in the county of Fünen (n = 670), Aarhus (n = 721) and Northern Jutland (n = 522) for the periods 1996–1997 and 2002. None of the three counties had introduced the SNLB in 1996–1997, however in 2002 the method was standard for staging the axilla in Fünen and Aarhus. Fünen was further characterized from the two other counties because of mammography screening.
Results: Unadjusted odds-ratios (OR) for a patient having lymph node metastasis significantly increased from 1996–1997 in Aarhus and Fünen (1.46 with 95% CI: 1.18 – 1.81) but not in Northern Jutland (1.23 with 95% CI: 0.87 – 1.72). Adjusted for age, histological type, tumor size, estrogen receptor status, malignancy grade and type of breast surgery (mastectomy/lumpectomy) gave for Aarhus and Fünen OR 1.65 with 95% CI: 1.30 – 2.10 and the result in Northern Jutland was OR 1.01 (95% CI: 0.84 – 1.20). However the distribution between high-risk and low-risk patients did not change significantly from 1996–1997 compared with 2002 in the two counties where SNLB were used.
Conclusion: The SLNB results in statistically significant increase in the probability detecting lymph node metastasis in populations where the SNLB is used compared to populations where the method is not used. The unchanged distribution between high- and low-risk patients suggests that SNLB has only little impact on the choice of adjuvant therapy.

Poster presentations (Mon, 31 Oct)
Surgery

1440 POSTER

Use of endovideosurgery in diagnostics and treatment of abdominal oncology

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Aims: Use of new technology in diagnostics and treatment of abdominal oncology
Material and methods: Videolaparoscopy was used in diagnostics and treatment of 440 patients with abdominal oncology during the period from 1995 till 2004. The aims of endovideosurgical interventions were desease staging, estimation of operability of a tumour or realization of curative measures. In this group in 85 cases during videolaparoscopy cancer spreading on parietal and visceral peritoneum or multiple metastases of the liver were revealed that has allowed to avoid unnecessary laparotomy and the patients were discharged for symptomatic treatment on 3 or 4 day after operation. At 16 patients with inoperable tumours were carried out miniinvasive interventions under laparoscopic control, in particular gastrostomy in 5 cases, colostomy in 5, cholecystoenterostomy in 6 cases.
Results: In 225 cases during laparoscopic exploration signs of remote metastases and unresectable tumours were not found and laparotomy was undertaken In 189 cases the data of videomonitoring of operability of a tumour have proved to be true and radical operation were performed. In 36 cases (16.0%) the tumour has appeared unresectable and there were false positive results of patient operability.
In 64 cases laparoscopy was made due to ultrasonic or CT signs of liver lesions. In this group of patients the primary carcinoma of the liver was diagnosed in 5 cases, metastases in the hepar were revealed in 27, liver hemangiomas in 16, liver cysts in 4, and diffuse lesions of the liver in 12 cases.
In 14 cases second-look laparoscopy was carried out with the aim of estimation of the remote results of the treatment.
In 26 oncological patients with concomitant gallstone desease laparoscopic cholecystectomy was performed. In 16 patients with the advanced mammarian cancer bilaterial laparoscopic ovarectomy was performed as a stage of complex treatment.
Conclusion: Endosurgical interventions in abdominal oncology has allowed to facilitate diagnostic and treatment tasks, to specify tumor hystotype and patient operability and perform miniinvasive palliative operations in the cases of unoperable tumor. Serious complications during laparoscopic interventions were not observed except 2 cases (0.5%) of hematomas of abdominal wall in the place of trocar insertion.

1441 POSTER

Craniofacial tumors. the operation and reconstruction

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Introduction: The skull base reconstruction is a very important procedure in the cases of radical resection of skull base tumors.
Materials and Methods: We presented 72 patients (male 40, female 32), aged 3.5 to 76 years, with skull base tumors extending into the orbits and paranasal sinuses (benign 45, malignant 27). All these lesions were divided into 3 groups:
– **I group.** The midline lesions (42 cases) included defects of ethmoid and sphenoid sinuses, frontal sinuses, medial parts of maxillary sinuses.
– **II group.** The lateral lesions involved lateral parts of frontal sinus, upper-lateral parts of maxillary sinus as lateral skull base defects (19 cases).
– **III group.** Combined skull base defects included both medial and lateral defects with widely opened paranasal sinuses and nasopharynx. (11 cases).
Results and Conclusions: It's important to emphasize that the reconstruction with a periosteum flap from frontoparietal area should be preferred in midline defects, a temporalis muscle flap with adjusted periosteum-in lateral defects. The reconstruction with autograft using microsurgery technique (m. latissimus dorsi flap, m. pectoralis, combined flap using m.pectoralis and m. abdominalis rectus musculocutaneous flap, omentus, m. latissimus dorsi with split-rib grafts) is indicated in case of combined defects. It's observed that two patients had nasal cerebrospinal fluid leak which resolved after continuous lumbar drainage. Preoperative planning of optimal method of closure of skull base defect depends on location and expansion of skull base tumor.
Keywords: Skull base tumors; skull base reconstruction

1442 POSTER

Clinical experience of the staple line wrapping with absorbable felt to prevent air leakage after thoracoscopic surgery

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Background: To prevent the postoperative prolonged air leakage, staple-line reinforcement is often needed for the patients with emphysema combined with lung cancer. The purpose of this study is to evaluate the merit and demerit of suture-line wrapping method with polyglycolic acid (PGA) felt for lung resection by video-assisted thoracoscopic surgery (VATS).
Methods: PGA felt wrapping procedures were as follows. After the lung resection with autosutures, we tied 3 to 5 sections of staple line using 1−0 silk and threaded the sheet of PGA through the access port. PGA felt was fixed by 1−0 silk ligatures and 100 mg minocycline (MINO) solution was applied to the PGA sheet.
Since January 2003, VATS with PGA felt wrapping were performed for 20 patients (Group A), and VATS without wrapping were 20 (Group B), prospectively. We compared both groups to check the clinical course and complications.
Results: The average of postoperative drainage period was 1.5 days in group A (range 1 to 4), and 1.9 days in group B (range 1 to 8). The rate of prolonged air leaks (more than or equal to 5 days) was 0% in group A, and 10.0% (2 cases) in group B. One case in group B was needed re-operation for air leakage.
Patients treated PGA felt had shorter periods of postoperative drainage. However, there was one patient with postoperative empyema in group A. Six days later after the drain was withdrawn, empyema was suspected. Turbit effusion was discharged by thoracentesis and methicillin-resistant staphylococcus aureus (MRSA) was cultured. Irrigation and Teicoplanin (Targosid) administration were effective and, after 2 weeks, MRSA died away. We had no need to remove the PGA felt. There was no other postoperative complication and no mortality in both groups.
Conclusions: VATS with PGA felt is a useful method that may reduce the air leakage from the staple line and postoperative chest drainage periods. However, we must be careful about the postoperative empyema.