S220 Proffered Papers

Results: We had 27 cases of GIST, 17 male, 10 female, mean age 66.3 year-old (39 to 92 y.o.). The primary lesion of GIST were 3 of esophagus (11.1%), 13 of stomach(48.1%), 2 of duodenum(7.4%), 7 of small intestine(25.9%) and 2 of large intestine(7.4%). We operated 25 cases without 1 of duodenum with liver metastases and 10f small intestine with giant tumour. Conventional curative operation was carried out 17 cases. Laparoscopic curative operated 5 cases were less than 5 cm in size. Non curative operated 3 cases were all dead. 22 of curative operation had no postoperative adjuvant therapy and they are all alive without recurrence. Treatment of imatinib mesylate administered 5, 1 was effective and 4 were not effective. 1 effective case arisen from duodenum with liver metastases is alive in 74 months from the start of this therapy.

**Conclusions:** The goal of surgical treatment is complete gross resection with an intact pseudocapsule. Lymphadenectomy is usually unnecessary because lymph node metastases are so rare with GIST and sarcoma in general.

The first choice of surgical treatment of GIST is conventional curative resection of tumours according to Japanese Guideline. In selective cases of small tumour, laparoscopic complete resection is allowed for minimally invasive surgery. Treatment of imatinib mesylate should be done firstly in inoperative cases and secondly in cases of incomplete resection.

2510 POSTER

Ultraradical Surgery and Heated Intraperitoneal Chemotherapy (HIPEC) as Multimodal Treatment of Advanced Colorectal Cancer

S. Nicolic<sup>1</sup>, M. Zegarac<sup>1</sup>, I. Djurisic<sup>1</sup>, A. Martinovic<sup>1</sup>, M. Buta<sup>1</sup>, D. Radosavljevic<sup>2</sup>, M. Kocic<sup>1</sup>. <sup>1</sup>Institute for Oncology and Radiology of Serbia, Surgery, Belgrade, Serbia; <sup>2</sup>Institute for Oncology and Radiology of Serbia, Oncology, Belgrade, Serbia

**Background:** Examin does agressive surgical treatment in combination with HIPEC (oxaliplatin) could increase median survival in patients with advanced stage of colorectal cancer.

**Method:** Ultraradical surgery and HIPEC was applied in patients who were initialy with peritoneal carcinomatosis or infiltration in around organs. We evaluated the patients during the period 2000–2009 in this retrospective study.

**Results:** During 2000 and 2009 we performed 90 ultraradical surgical procedures which in considered: histerectomy, bilateral adnexectomy and en block resection of rectosygmoid colon, total omentectomy, total peritenectomy, partial peritonectomy, splenectomy, liver resection.

All patients were treated with HIPEC (40C) using oxaliplatin (410 mg/m²) in 3l of perfusat during 90 minutes. The average duration of the procedure was 5h 57 minutes. The follow up period was 9 years. One year survival rate was 81.25% and three year survival rate was 56.25%.

**Conclusion:** Ultraradical surgery combined with HIPEC prolongs patient's survival and is considered to be a safe procedure if performed by the experience team of oncological surgeons.

2511 POSTER

Needle Oophoropexy – a New Simple Technique for Ovarian Transposition Prior to Pelvic Irradiation

Z. Gad<sup>1</sup>, W. Gareer<sup>1</sup>, H. Gareer<sup>1</sup>. <sup>1</sup>NCI, Surgical Oncology, Cairo, Egypt

Background: Irradiation of the pelvis in the treatment of cancers will result in ovarian failure unless the ovaries are shielded adequately. To protect the ovaries, an oophoropexy may be performed. Our aim was to evaluate the feasibility, morbidity, and efficacy of laparoscopic ovarian transposition using a simple percutaneous needle technique.

Materials and Methods: Fifteen patients (ten with rectal cancer and five with Hodgkin's disease) underwent the new laparoscopic cophoropexy technique. Laparoscopic releasing of the ovary was performed by cutting the utero-ovarian ligament followed by placing the ovaries on the anterior abdominal wall. A percutaneous straight needle was introduced through a 2-mm skin incision at the site of fixation. Repositioning of the ovaries was done on an outpatient basis without the need for readmission to the operating theatre.

**Results:** The technique was effective, reliable, and simple with no morbidities. Repositioning was performed simply in the outpatient clinic. At follow-up, 11 patients had evidence of ovarian function.

**Conclusion:** Percutaneous needle transposition of the ovaries is a simple, effective, reliable, and easy-to-perform technique. It has short learning curve and can be done by less experienced laparoscopic surgeons.

2512 POSTER

The Value of Mastectomy Flap Fixation in Reducing Fluid Drainage and Seroma Formation in Breast Cancer Patients

M. Sakkary<sup>1</sup>. <sup>1</sup>National Cancer Institute, Department of Surgery, Cairo, Eqvpt

**Background:** Prolonged, and excessive drainage of serous fluid and seroma formation constitute the most common complications after mastectomy for breast carcinoma. Seroma formation delays wound healing, increases susceptibility to infection, skin flap necrosis, persistent pain and prolongs convalescence.

Materials and Methods: Between June 2009 and July 2010 forty patients with breast carcinoma, scheduled for modified radical mastectomy, were randomly divided into 2 groups, the study group (20) and the control group (20). In the study group; the mastectomy flaps were fixed to the underlying muscles in raws of stitches, at various parts of the flap and at the wound edge using fine absorbable sutures. In the control group; the wound was closed in the conventional method at the edges. Closed suction drains were used in both groups. Patients, tumour characteristics and operative related factors were recorded. The amount and colour of drained fluid were recorded daily. The drains were removed when the amount become less than 50 cc. The total amount and duration of drained fluid and the formation of seroma were recorded and the results were compared between the two groups.

Results: In the flap fixation group, the drain was removed in significantly shorter time compared to the control group (p < 0.001). Also, the total amount of fluid drained was significantly lower in the flap fixation group (p < 0.001). The flap fixation group showed a significantly lower frequency of seroma formation compared to the control group, both clinically (p = 0.028) and ultrasonographically (p = 0.047).

**Conclusions:** The mastectomy flap fixation technique is a valuable procedure that significantly decreases the incidence of seroma formation, and reduce the duration and amount of drained fluid. However, it should be tried on a much wider scale to prove its validity.

2513 POSTER

## Pancreatoduodenectomy With Portal Vein Resection and Recontruction

Y. Iso<sup>1</sup>, T. Sawada<sup>1</sup>, M. Kato<sup>1</sup>, J. Kita<sup>1</sup>, M. Shimoda<sup>1</sup>, K. Kubota<sup>1</sup>.

<sup>7</sup>Dokkyo Medical University, Gastroenterological Surgery, Tochigi, Japan

Background: Pancreatobiliary carcinoma readily progresses and infiltrates other tissues due to the invasiveness and the complex anatomy of the affected region. In particular, pancreatic head carcinoma frequently infiltrates the portal vein (PV). In the present study, we reviewed the cases of pancreatoduodenectomy (PD) with PV resection performed at our department.

**Methods:** Between April 2000 and March 2011, 223 patients with pancreatobiliary carcinoma underwent PD at our department. Patients were divided to 2 gourps; PD with PV resection (PV group, n = 38), and PD without PV resection (non-PV group, n = 185). Clinicopatholoical data were compared. PD was always performed with extended lymphadenectomy. Data were expressed PV group to non-PV group in order.

**Results:** Mean ages were 67.6 and 68.9 years old, respectively. And males/females 20/18 and 110/75. Mean operation times were 583.4 vs. 547.8 minutes (P = 0.16), and operative blood losses was 897.8 vs. 777.0 ml (P = 0.41). Post-operative hospital stays were 34.0 days and 42.0 days (P = 0.11). Mean survival periods was 23.6 months and 26.8 months, (P = 0.88). In PV group, histological portal vein infiltration was observed in 21 of the 38 patients, and there were 3 cases of bile duct carcinoma and 18 cases of pancreatic head carcinoma.

Case Study: We present a video-taped operation of PD with PV resection. The patient was a 72-year-old female with suspected PV infiltration of pancreatic head carcinoma. Operation time was 450 minutes and blood loss was 933 ml. Invaded portal vein was resected and simply reconstructed with end to end anastomosis. Postoperative course was uneventful, and the patient was discharged on postoperative day 17.

Conclusion: PV resection should be combined with PD if PV infiltration is suspected.

2514 POSTER
Pancreatic Remnant Occlusion After Whipple's Procedure: an
Alternative Oncologically Safe Method

D. Dellaportas<sup>1</sup>, A. Yiallourou<sup>1</sup>, E. Ntakomyti<sup>1</sup>, V. Psychogiou<sup>1</sup>,
 A. Fotopoulos<sup>1</sup>, T. Theodosopoulos<sup>1</sup>. <sup>1</sup>University of Athens Areteion Hospital, 2nd Department of Surgery, Athens, Greece

**Background:** Progress in surgical technique and peri-operative management has significantly reduced the morbidity and mortality rate of pancreatic

resection procedures. The majority of postoperative complications after pancreatoduodenectomy (PD) arise from pancreatic leakage by the pancreatic stump. The optimal management of the pancreatic remnant after PD remains a challenge. An interesting alternative option is the pancreatic stump occlusion technique with various methods. Our institution's eight-year experience using this approach in a selected group of patients is presented herein.

Materials and Methods: A retrospective study was performed in a nonselected series of 93 patients treated between 2002–09 with suspected pancreatic and periampullary cancer or chronic pancreatitis and were managed with Whipple's procedure. In 37 patients the pancreatic duct was occluded without anastomosis of the pancreatic remnant by stenting and a running 3–0 polypropylene suture, and in 56 patients a pancreaticojejunostomy was performed after PD. All patients were operated by the same surgical team.

Results: From the 37 patients two were treated for chronic pancreatitis whereas the rest of them for periampulla malignancies (including cancer of the pancreatic head). On the other group, from the 56 patients 9 were treated for chronic pancreatitis and the others for malignancies as well. The mean operative time for the occlusion group was 180 minutes versus 210 minutes in the anastomosis group. Mean hospitalization time was 6 days (4-11 days) for both groups. The mortality rate was 0% for the first group, and 3% (1 patient died of myocardial infraction and one of postoperative hemorrhage) for the anastomotic one. The morbidity rate was 24% in the occlusion group versus 32% in the latter one. From the postoperative complications a slightly higher incidence of pancreatic fistulas was observed at the anastomosis group of patients. Finally, there was no difference in one year survival rate among both populations. According to the literature the function of the islets of Langerhans is not affected by pancreatic duct occlusion. In our series there was no difference between the two groups neither to the patient needs of pancreatic enzymes replacement nor the diabetes incidence postoperatively. The decision for occlusion of the pancreatic remnant is directed by the pancreatic duct preoperative imaging (either ERCP or MRCP featuring an already occluded duct) or the intraoperative appearance of the duct.

Conclusions: Pancreatic remnant occlusion is a safe, time consuming and less complicated alternative management of the pancreatic stump during Whipple's procedure. Additionally, it does not affect the oncologic principles and long term survival of patients treated for cancer of the head of the pancreas.

2515 POSTER

Clinical Prediction of Survival by Surgeons for Patients With Incurable Malignant Disease

T. Hølmebakk<sup>1</sup>, A. Solbakken<sup>1</sup>, T. Mala<sup>1</sup>, A. Nesbakken<sup>2</sup>. <sup>1</sup>Oslo University Hospital, Department of Surgical Gastroenterology, Oslo, Norway; <sup>2</sup>University of Oslo, Faculty of Medicine, Oslo, Norway

**Background:** Accurate prognosis facilitates decision-making and councelling in incurable cancer. However, predictions of survival are frequently inaccurate and survival is consistently overestimated. The prognostic skills of surgeons are sparsely documented, and the present study was undertaken to assess their prognostic accuracy for patients with advanced abdominal malignancy.

Patients and Methods: Clinical predictions of survival were made by three consultant surgeons independently in consecutive patients with incurable abdominal cancer. Survival was predicted in intervals ranging from <1 week to 18–24 months. Prognoses were considered accurate when actual survival fell within the expected range. Performance status was classified according to the Eastern Cooperative Oncology Group (ECOG).

**Results:** 243 assessments were made in 178 patients. Prognoses were accurate in 27%, over-optimistic in 42% and over-pessimistic in 31%. Accuracy was inversely related to lenght of survival and did not differ between surgeons (P = 0.466). The proportion of over-optimistic prognoses differed significantly between surgeons (P < 0.001). Prognostic accuracy was 44% in gastric cancer patients, 29% in pancreatic cancer patients and 22% in colorectal cancer patients (P = 0.052). ECOG performance status correlated well with survival.

**Conclusions:** Surgeons' accuracy in determining prognosis is poor. There are considerable individual differences between surgeons, and accuracy is reduced in cases with prolonged life expectancy.

Accepted for publication (in press) in the European Journal of Surgical Oncology, Eur J Surg Oncol (2011), doi:10.1016/j.ejso.2011.02.009.

2516 POSTER

Results of Surgical Reinterventions Following Colorectal Cancer Surgery: Open Versus Laparoscopic Reinterventions

<u>D. Lips</u><sup>1</sup>, R. Abegg<sup>1</sup>, W. Brokelman<sup>1</sup>, M. Ernst<sup>1</sup>, K. Bosscha<sup>1</sup>, H. Prins<sup>1</sup>. <sup>1</sup>Jeroen Bosch Ziekenhuis, General Surgery and Surgical Oncology, Den Bosch, The Netherlands

Background: Colorectal cancer surgery is performed frequently through both open and laparoscopic procedures. In as much as 15% cases a surgical reintervention is necessary. Although increasing data arises about primary laparoscopic colorectal surgery, less is known about the results of open and/or laparoscopic surgical reinterventions in case of complications. This study aims to investigate the morbidity and mortality derived from open and/or laparoscopic surgical reinterventions.

Materials and Methods: Retrospectively 87 consecutive patients operated upon between January 2008 and December 2010 were enrolled in the study. All patients underwent complicated colorectal cancer surgery, of which 58 patients were initially operated open followed by an open reintervention (open-open), 21 patients initially laparoscopic followed by an open reintervention (lap-open) and 8 patients with both laparoscopic procedures (lap-lap).

Primary endpoint was mortality. Secundary endpoints were complications classified according to the modified Clavien-Dindo scale, amount of reinterventions, total hospital stay, intensive care admissions and extent of stay, division rate and amount of radiological examinations.

**Results:** The three patient groups were comparable according to age, ASA-classification and comorbidity. Significant more Dukes D stage carcinomas and more acute initial presentations were observed in the open-open group.

A significant decrease in in-hospital mortality was seen in the total laparoscopic group (lap-open and lap-lap), independent of reintervention method (open-open 22.4%, lap-open 4.8% and lap-lap 0%). No significant differences were found in the secondary endpoints (total hospital stay, intensive care stay, amount of reinterventions, division rate and radiological examinations), although there was a trend towards decreased intensive care admissions and stay, total hospital stay and radiological examinations in the laparoscopic reintervention group.

Conclusion: Initial laparoscopic colorectal cancer surgery is related to less mortality and morbidity when complications arise, irrespective of the reintervention method. Best results seem to be reached when both primary and reintervention surgery is laparoscopic (lap-lap), although the presented study is biased by selection-bias and its retrospective character. However, these results should initiate prospective studies focussed on the precise role of laparoscopic surgery following colorectal cancer surgical complications.

Poster Discussion Presentations (Mon, 26 Sep, 13:15–14:15)

## **Symptom Science**

POSTER DISCUSSION

Effectiveness and Tolerability of Ferric Carboxymaltose in the Correction of Cancer – and Chemotherapy-associated Anaemia – a Multicenter Observational Study

H. Steinmetz<sup>1</sup>, B. Tschechne<sup>2</sup>, G. Virgin<sup>3</sup>, B. Klement<sup>4</sup>, B. Rzychon<sup>5</sup>, M. Franzem<sup>6</sup>, J. Wamhoff<sup>7</sup>, H. Tesch<sup>8</sup>, R. Rohrberg<sup>9</sup>, N. Marschner<sup>10</sup>. 

<sup>1</sup> Gemeinschaftspraxis für Onkologie und Hämatologie, Cologne, Germany; 

<sup>2</sup> Onkologische Gemeinschaftspraxis, Lehrte, Germany; 

<sup>3</sup> Vifor Pharma Deutschland GmbH, Munich, Germany; 

<sup>4</sup> Vifor Pharma Ltd, Glattbrugg, Switzerland; 

<sup>5</sup> Vifor Pharma Ltd, Freiburg, Germany; 

<sup>6</sup> iOMEDICO AG, Freiburg, Germany; 

<sup>7</sup> Onkologische Schwerpunktpraxis, Osnabrück, Germany; 

<sup>8</sup> Fachpraxis für Onkologie Hämatologie und Immunologie, Frankfurt, Germany; 

<sup>9</sup> Gemeinschaftspraxis und Tagesklinik für Hämatologie Onkologie und Gastroenterologie, Halle, Germany; 

<sup>10</sup> Praxis für Interdisziplinäre Onkologie und Hämatologie, Freiburg, Germany

Background: Functional iron deficiency (FID; transferrin saturation [TSAT] <20% and ferritin >100 ng/mL) can cause low response to erythropoiesis-stimulating agents (ESAs). In different disease areas including oncology, intravenous (I.V.) but not oral iron enhances erythropoiesis in ESA-treated anaemic patients. This 12-week observational study evaluated the effectiveness and tolerability of ferric carboxymaltose (FCM) in routine treatment of unselected anaemic cancer patients.

Materials and Methods: 639 patients were enrolled and treated without restrictions at 68 haematology/oncology practices in Germany. 619