intrapapillary mucinous tumors (IPMN) or mucinous cystic tumors (MCN) and other rare tumors are increasing. However, in almost 40% of the patients with potentially resectable pancreatic cancer surgery is not offered, although 5-year survival rates are up to 40% or even higher in selected patients depending on tumor stage and histology [1]. Therefore surgicals kills and techniques and the perioperative management have to be improved to obtain curative resection and increase survival. Further factors influencing the outcome are the hospital volume and surgical experience [2]. Standard procedures for tumors in the head of the pancreas are the Kausch–Whipple- or pylorus-preserving Whipple procedure including local lymphadenectomy. For tumors left to the portal vein the procedure of choice is the left lateral pancreas resection, generally including lymphadenectomy and splenectomy. Whereas pancreatic fistulas after a Whipple procedure is as low as 2% in experienced hands [3], the fistula rate after left resection increases up to 40% depending on the technique used. Indications for extendend pancreatic surgery are increasing including venous and arterial infiltration, involvment of surrounding organs indicating multivisceral resections and surgery for metastatic disease or palliative pancreas resection. Nowadays, portal vein resection for local infiltration with or without replacement by a graft is established without change of mobidity or mortality or an increased rate fo R1 resection. Although arterial resection is in many cases technically feasable its oncologic impact remains questionnable and is reserved to rare indications. Although the value of extended lymphadenectomy is frequently debated, recent studies show no advantage (evidence level I) [4]. Multivisceral resections, i.e. in tumors of the tail of the pancreas invading the colon or stomach or other surrounding tissues are associated with an increased and a longer stay in the hospital. But they show comparable mortality- and survival rates to those without infiltration and therefore should be performed if technically feasable [5]. Data of surgical treatment in patients with metastatic pancreatic diesease do not show any advantage to palliative treatment but can be an option in selective patients with easily removable metastasis. Although some data indicate an increased 2-year survival for patients with palliative resection (R2) due to those only with palliative surgery (bypass surgery) it does not justify its increased morbidity and mortality and especially loss of quality of life [6]. Cystic tumors of the pancreas are increasing, probably due to earlier detection by high resolution imaging. Serous cystic tumors rarely become malignant and therefore do not need surgery except they become symptomatic. Due to its high malignant potential mucinous cystic tumors (MCN) should generally be operated such as main-duct IPMN's. Branch-duct IPMN have to be operated when they are larger than three centimeters or when thy show nodal involment or signs of malignancy. Parenchyma sparing procedures such as enucleation are reserved for benign diseases i.e. cystic tumors (branch-type IPMN). In conclusion pancreatic surgery beyond the traditional limits is established in tumors infiltration the venous system and may be an approach in patients with locally infiltratiing pancreatic cancer or metastasis but is not an option for palliative surgery.

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PG 4.03 SPEAKER ABSTRACT

Adjuvant therapy in resected pancreatic cancer

J.P. Neoptolemos. *University of Liverpool, Liverpool Cancer Research UK Centre, Liverpool, United Kingdom*

Resection rates of above 15% can be achieved in specialised centres with 5y survival rates of 10% and can be improved to 25−30% with adjuvant systemic chemotherapy. GITSG randomised 43 patients between chemoradiation (40 Gy with weekly 5-Fluorouracil (5FU) for two years) vs. surgery alone [1]. Median survival was increased in the treated group (20m vs. 11m, $p = 0.035$). The ESPAC1 trial was the first adequately powered, randomised study in resected pancreatic cancer [2]. Initial analysis of all 541 patients indicated no survival benefit for adjuvant chemoradiotherapy but the results for chemotherapy were inconclusive with only ten months' median follow-up. The final results of this trial in the 289 patients restricted to the original 2×2 factorial design definitively demonstrated a survival benefit for chemotherapy, but not for chemoradiotherapy [3]. The 5 y survival for chemoradiation was 10.0% and 19.6% without ($p = 0.05$) and 21.1% for chemotherapy and 8.4% without ($p = 0.009$). Quality of life improved after adjuvant therapy irrespective of the modality or combination of modalities [4]. A survival advantage was also demonstrated for adjuvant combination chemotherapy using 5FU, doxorubicin and mitomycin C in another randomised controlled trial [5]. A metaanalysis using individual patient data showed that the survival benefit of adjuvant chemotherapy extended to patients with R1 resection margins although the treatment effect was much less [6]. The EORTC randomised 218 patients (104 with ampullary tumours) to adjuvant chemoradiation (but with no follow-on chemotherapy) vs. surgery alone but survival was not improved [7,8]. The RTOG9704 trial randomised 538 patients to either pre- and post-chemoradiation gemcitabine or to pre- and post-chemoradiation 5FU [9]. The median survival in the 451 'eligible' patients was 16.7 mo and 18.8 mo respectively ($p = 0.34$) and in the 388 patients with pancreas head cancer 20.5 mo vs. 16.9 mo ($p = 0.09$). In the CONKO-001 trial DFS was 13.4 mo for gemcitabine and 6.9 mo for surgery alone ($p < 0.001$); median overall survival was 22.1 mo and 20.5 mo respectively ($p < 0.06$) [10]. A Japan trial which enrolled 119 patients showed longer DFS for gemcitabine than surgery-only (median 11.4 versus 5.0 mo; $p = 0.01$) [11] but not overall survival (22.3 versus 18.4 mo; $p = 0.19$). The ESPAC3 trial randomised 1088 patients to 5FU and folinic acid (FA) or to gemcitabine [12]. Median (95% CI) survival of patients treated with 5FU/FA was 23.0 mo (21.1, 25.0) and 23.6 mo (21.4, 26.4) for gemcitabine ($p = 0.39$; 0.81, 1.08). There were no differences in either DFS or global quality of life scores. Thus, there were no significant differences between the two treatments although adjuvant gemcitabine had an improved safety profile. Using individual patient data from both ESPAC1 and ESPAC3 a composite data analysis confirmed that adjuvant 5FU/FA had a significant survival benefit compared to observation for patients with pancreatic cancer [13]. Two major Editorials have supported the conclusions of the ESPAC trials and raise very serious questions about the continued use of adjuvant chemoradiation [14,15]. ESPAC4 trial is comparing combination chemotherapy with gemcitabine plus capecitabine with gemcitabine alone [16]. There is already rapid recruitment with sites throughout the United Kingdom, Sweden, France and Germany.

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PG 4.04 SPEAKER ABSTRACT

Radiochemotherapy of the pancreas: State of the art 2012

F. Mornex, O. Diaz, C. Enachescu. *Radiation Oncology, Centre Hospitalier Lyon Sud, Pierre Benite, France*

Pancreatic ductal adenocarcinoma is the fourth leading cause of cancer-related mortality and is associated with an extremely poor prognosis, reflected by a median survival of 5−8 mo and a 5-y survival probability of less than 5% when all stages are combined. Currently, the only chance for cure and prolonged survival is surgical resection with macroscopic tumor clearance. However, only approximately 10%-20% of patients are candidates for curative resection. The majority of patients (50%-60%) present with metastatic disease, and thus palliative chemotherapy remains the only option for almost all of these patients [1]. Radiotherapy has a large role to play in the therapeutic management of this disease,

1. As a neoadjuvant approach for locally advanced resectable or borderline resectable tumors, most of the time in combination with chemotherapy. In a substantial number of patients (approximately 30%-40%) the disease is considered "locally advanced" at the time of diagnosis. This group of patients has been intensively discussed during the last years and neoadjuvant therapies have been proposed to achieve better local tumor control or tumor down-staging with a subsequent potentially resectable tumor [2]. Neoadjuvant therapy in this context is defined as any preoperative therapy aiming to convert unresectable to resectable tumors and/or to increase microscopic complete tumor resection rates [3, 4].
2. As an adjuvant approach, for R0 and/or R1 resected tumors, according with the literature.
3. For locally advanced unresectable tumors, in order to aim to cure the disease [5].
4. As a symptomatic treatment, either locally in case of local pain, or for a compressive effect relief, or for treating metastases.

In all these situations, radiotherapy benefits of the technical improvements like IGRT (Image Guided Radiation Therapy) which helps improving the tumor location immediately before and even during radiation delivery, for an optimal tumor targeting [6], like IMRT (Intensity Modulated Radiation Therapy) for

optimally sparing the normal critical tissues surrounding the target to be irradiated [7], like SBRT (Stereotactic Body Radiation Therapy) for small lesions, in order to increase the delivered radiation dose in selected cases. SBRT has also been proposed to preoperatively irradiate the posterior margin area, in an attempt to increase the R0 resection rate in this difficult to resect area [8]. All these aspects will be described and precisely discussed at the time of the conference.

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Thursday, 22 March, 16:00−17:30

Session IV. Different Cancer Types in the Oesophagus and Stomach

PG 5.01 SPEAKER ABSTRACT

Modern endoscopic imaging of gastrooesophageal lesions: Different techniques for different locations

R. Kiesslich. *Interdisziplinäre Endoskopie, Uniklinik Mainz, Mainz, Germany*

The prognosis of esophageal neoplasia is closely related on the stage of the disease at the time of detection. Early neoplastic lesions have an excellent prognosis in contrast to more advanced stages that usually have a dismal prognosis. Therefore, the early detection of these lesions is of great importance.
Several new endoscopic techniques have been introduced to improve the endoscopic detection of early lesions. The most important improvement, in general, has been the introduction of high-resolution/high-definition endoscopy into daily clinical practice. The value of superimposing techniques such as chromoendoscopy, narrow band imaging and computed virtual chromoendoscopy onto high-resolution/high-definition endoscopy do further refine the characterization of lesions and guide endoscopic therapy.
Furthermore endomicroscopy enables in vivo histology during ongoing endoscopy at subcellular resolution. This leads to immediate histological diagnosis of Barrett's esophagus and associated neoplasia. Endomicroscopy will also open the door for functional and molecular imaging as initial studies have shown.
Standardized teaching of the new diagnostic possibilities will be of fundamental importance to provide the affected patients with the best standard of care.

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PG 5.02 SPEAKER ABSTRACT

Adenocarcinoma of the GEJ: gastric or oesophageal cancer?

J. Rüschoff. *Pathologie Nordhessen, Kassel, Germany*

Adenocarcinomas of the Oesophagus (OC) and Stomach (SC) are two different types of tumors that showed marked changes of incidence with constant rise of OC and decrease of SC during the last three decades in the Western World. Both types arise by two different etiological mechanisms − reflux and Barrett metaplasia in OC and H. pylori infection in SC. However, much confusion exists about the tumors at the distal third of oesophagus and gastric cardia. Adenocarcinomas at the gastrooesophageal junction (GOJ) have recently been defined as a third tumor type (GOJ cancer) by WHO Classification of Tumours of the Digestive System (2010). This classification is replacing the anatomic system of Siewert suggesting that type I (distal oesophageal) is different from type II (cardiac) and type III (subcardiac) adenocarcinoma. These tumors have now been included within the oesophageal category by UICC Cancer Staging Manual (7th ed., 2010). Besides morphologic heterogeneity (WHO 2010) there is strong evidence that at least two main different molecular pathways of carcinogenesis exist. Based on differences in the immunohistological-phenotype (intestinal vs gastric type cancer) and the accompanying background mucosa (Barrett vs cardiac type) about 70% of GOJ adenocarcinomas turned out to be associated with Barrett's metaplasia (*intestinal-type neoplastic pathway*) and about 1/3 with metaplastic columnar epithelium (*non-intestinal neoplastic pathway*). These pathways reflect distinct clinical and prognostic groups being significantly different with respect to the prevalence of potential therapy target such as EGFR and Her2/neu (Demicco et al., Mod Pathol 2011). In the latter anti-Her2 therapy recently turned out to be effective (Bang et al., Lancet 2011) which was based on specifically developed Her2 testing guidelines (Rüschoff et al., Mod Pathol 2012). Finally, the impact of the intestinal and non-intestinal pathway concept on current recommendations of AGA to not perform endoscopic surveillance in patients solely with (non-intestinal) columnar-type epithelium in the esophagus (http://www.gastrojournal.org/article/S0016-5085%2811%2900084-9/fulltext#sec2) will be challenged.

PG 5.03 SPEAKER ABSTRACT

Molecular mechanisms in gastric cancer: Basis for therapy?

R. Seruca. *IPATIMUP, Porto, Portugal*

Gastric cancer (GC) is one of the leading causes of cancer-related death worldwide, even though its incidence and mortality rates have been declining in recent decades. At initial diagnosis, most GC patients present an advanced disease stage with a high risk of relapse after surgical treatment. Various multimodal therapy regimens are used to improve the patient prognosis, with limited success. The high prevalence of incurable disease produces a heavy burden on patients' care which has a huge effect on healthcare resources. E-cadherin alterations/deregulation is a frequent event in gastric carcinogenesis, as an initiation event in more than 50% of diffuse GC, and as a progression event, by increasing epithelial cell invasion, in more than 70% of all gastric cancers. Recently, E-cadherin was suggested to act as a cell membrane receptor interacting with many signalling molecules. In this regard molecules interacting with E-cadherin became central targets for therapeutic intervention in gastric cancer. An increasing number of genetic and epigenetic alterations have also been associated with distinct histological types of gastric cancer. We will discuss the involvement of E-cadherin, EGFR, ERBB2, MMR genes, KRAS, and PIK3CA in the development and progression of gastric cancer and their role as biomarkers or as novel putative targets for therapy. We will also pay special attention to define the subset of gastric carcinoma which may benefit from EGFR and Notch inhibitors.

PG 5.04 SPEAKER ABSTRACT

Why is there a change in patterns of GE cancer?

J. Jankowski. *Centre for Digestive Diseases, Barts and the London School of Medicine and Dentistry, London, UK*

Abstract not available.

Friday, 23 March, 08:30−10:00

Session V. Choosing the Best Treatment for Oesophageal Cancer

PG 6.01 SPEAKER ABSTRACT

Who is a candidate for endoscopic surgery?

T. Oyama. *Gastroenterology, Saku Central Hospital, Nagano, Japan*

The incidence of lymph node metastasis is correlated with some pathological findings such as invasion depth, histological type and lymphatic or venous permeation [1,2]. However, these pathological findings could not be learned