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# P15 MORBIDITY, MORTALITY, AND SURVIVAL OF PATIENTS WITH PROXIMAL GASTRIC ADENOCARCINOMA AFTER PROXIMAL SUBTOTAL GASTRECTOMY – A COMPARATIVE STUDY

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Background: The advantages of proximal resection with jejunal interposition and modified D2 lymphadenectomy, for elderly patients, could outweigh the higher risk of recurrence with this less radical lymphadenectomy. The aim of our study was to evaluate proximal resection with modified D2 lymphadenectomy as an alternative in selected patients.

Methods: Between 1993 and 2009, 161 patients at our centre had surgery for adenocarcinoma of the proximal third of the stomach. Patients were divided into three groups: (1) PG, proximal resection with jejunal interposition and modified D2 lymphadenectomy (19.3%, 31 patients); (2) TH, transhiatal extended total gastrectomy with resection of the distal oesophagus and D2 lymphadenectomy (23.6%, 38 patients); (3) GT, total gastrectomy with D2 lymphadenectomy (57.1%, 92 patients). We analysed postoperative morbidity, 30-day mortality, and survival. Quality of life was evaluated with the gastrointestinal quality-of-life index (GIQLI) questionnaire.

Findings: Patients in the PG group (79.4  $\pm$  9 years) were significantly older than the patients in the GT (63.9  $\pm$  11 years) or TH group (60.1  $\pm$  12 years; p < 0.0001), and in worse general condition. Fewer lymph nodes were harvested in the PG group (17.2  $\pm$  11) than in the GT and TH groups (24.05  $\pm$  13 and 26.3  $\pm$  13). There were no significant differences in the distribution of pathohistological characteristics and tumour TNM stages between groups. An R0 resection could be done in 77.2–86.8% of cases. 30-day mortality was 9.7% in the PG group, 6.5% in GT, and 5.3% in TH. There were no differences in morbidity and 5-year survival between groups (25.3% in PG, 26.3% in GT, and 28.9% in TH). No differences were found in the total scores of the GIQLI questionnaire (p = 0.893). Patients in the PG group had the lowest scores in digestive functions.

Interpretation: Proximal resection should be reserved for highrisk elderly patients with proximal gastric cancer, who have shorter expected long-term survival. These resections carry acceptable morbidity and mortality; however, reconstruction with jejunal interposition does not bring the desired functional benefits.

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# P16 MAIN DETERMINANTS OF SEVERE NEUTROPENIA IN PATIENTS WITH SOLID TUMOURS RECEIVING ADJUVANT CHEMOTHERAPY

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Background: Chemotherapy-induced neutropenia, a toxic effect of systemic chemotherapy, is often associated with substantial mortality and morbidity; thus, identifying its related determinants is necessary. The aim of this study was to identify the main consequences of severe neutropenia following adjuvant chemotherapy, in a community-based population of patients with cancer in Iran-Semnan.

Methods: This prospective study included 828 consecutive patients who received chemotherapy for histologically proven primary or metastatic solid tumours. Demographics data, disease characteristics, and comorbidities (including current smoking and diabetes) were collected from interviews with the patients and their laboratory data and files. Patients had a complete blood count 1 week after the first course of chemotherapy.

Findings: Based on the absolute neutrophil count nadir value, 30 patients (3.6%) had severe neutropenia. Multivariable logistic-regression analysis showed that advanced age (OR = 5.262, p = 0.012) and diabetes mellitus (OR = 8.126, p = 0.015) were main determinants of severe neutropenia, with the presence of demographic characteristics and comorbidities as confounders.

Interpretation: We identified advanced age and diabetes as main determinants of high-grade neutropenia in Iranian patients with solid tumours who were receiving adjuvant chemotherapy.

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## P17 CLINICAL OUTCOMES AND PROGNOSTIC FACTORS FOR SURGICAL TREATMENT OF ADVANCED MEDULLARY THYROID CARCINOMA

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Background: Total thyroidectomy and central neck dissection are the procedures of choice for patients with medullary thyroid carcinoma (MTC). We reviewed patients with advanced MTC who underwent surgical treatment, to discuss the clinical outcomes and prognostic factors.

Methods: 132 patients had total or subtotal thyroidectomy with central neck dissection. Ipsilateral (n = 96) and bilateral (n = 36) modified radical neck dissection was done simultaneously, in patients with and without evidence of suspicious lymph nodes. After surgery, basal and stimulated serum calcitonins (Cts) were measured in all patients. Follow-up ranged between 5 and 12.5

months. Patients were considered to be cured when stimulated Ct was undetectable. Age, gender, tumour size, neck lymph-node metastasis, TNM stage, extent of surgical resection, postoperative external-beam radiation, and postoperative chemotherapy were analysed in all patients.

Findings: Of 132 MTC patients who had locally curative surgery, 68 (51.5%) had a tumour larger than 4 cm. 92 patients (69.7%) were biochemically cured and 76 (57.6%) cases involved lymph-node metastasis. Biochemical cure was significantly correlated with extrathyroid extension (p < 0.005), tumour size (p < 0.005), and lymph-node metastases (p < 0.0001). The 5-year and 10-year cancer-specific cumulative survival rates were 73.4% and 19.6%, respectively. In univariate analysis, age and the presence of node metastases were significant prognostic factors. Only age remained an independent prognostic factor in multivariate analysis.

Interpretation: Clinical outcome is significantly better for MTC patients younger than 45 years, regardless of tumour size and node metastases. The younger age at diagnosis and modified radical neck dissection might enhance the outcome. Age was a unique independent prognostic factor. Patients with MTC should be regarded as having systemic disease; and patients with a tumour larger than 4.0 cm, bilateral neck node metastases, and accompanying systemic symptoms are unlikely to be biochemically cured, even with extensive surgery.

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# P18 ECONOMIC EVALUATION OF ADJUVANT TRASTUZUMAB IN THE TREATMENT OF EARLY, HER2/NEU-OVEREXPRESSING BREAST CANCER IN SINGAPORE

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Background: Trastuzumab has revolutionised the way we treat early, HER2/neu-positive breast cancer, because it significantly improves disease-free and overall survival. Little is known about the societal costs and benefits of treatment with trastuzumab in the adjuvant setting in Asia. This study aimed to be the first economic evaluation of trastuzumab in Singapore and Asia, assessing its net economic gains to society.

Methods: An analytic model was used to estimate societal costs (and benefits) of treatment with trastuzumab in Singapore. Direct costs were derived from actual patient costs at four treatment centres in Singapore – two private and two public centres, comprising 60–70% of all patients with cancer. Indirect costs were assessed as the loss of productivity caused by the disease or treatment. Benefits to society were based on extra years of productivity (measured by GNI per capita) resulting from the quality-adjusted life-years (QALY) saved with the use of trastuzumab, as determined in the models by Kurian (J Clin Oncol 2007), Liberato (J Clin Oncol 2007), and Garrison (Cancer 2007). Sensitivity analysis was performed.

Findings: Incremental costs in Singapore were \$26,971.05 (all costs are in 2005 US dollars). The average cost per QALY was \$19,174.59 (median \$18,993.70). Costs (benefits) to society ranged from a cost of \$79.42 to a benefit of \$9,263.06 per person, depending on the model used (average benefit \$4,375.89, median \$3,944.03). Sensitivity analysis ranged from a cost of \$10,685.00 to a benefit of \$17,298.79.

Interpretation: Treatment with adjuvant trastuzumab is likely to generate net societal economic benefits in Singapore. Nevertheless, the lower range of possible outcomes does not refute the possibility that treatment may actually generate costs; however, these costs fall within the range of acceptable cost-effectiveness

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P19 HEPATITIS C VIRAL INFECTION AND OTHER RISK FACTORS FOR B-CELL NON-HODGKINS LYMPHOMA IN ADULT EGYPTIANS – WITHDRAWN

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#### P20 NATIONAL LIVER TISSUE BANK AND CLINICAL DATABASE IN CHINA

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Background: To develop standardised and well-rounded material for hepatology research.

Methods: The National Liver Tissue Bank (NLTB) project began in China in 2008, to make well-characterised and optimally preserved liver tumour tissue available and to create a clinical database.

Findings: From December, 2008, to June, 2010, more than 3000 individuals enrolled at the NLTB as liver tumour donors, including 2317 cases of newly diagnosed hepatocellular carcinoma (HCC), and about 1000 cases diagnosed as benign or malignant liver tumours. The clinical database and sample store can be managed easily and correctly with the data management platform used.

Interpretation: We believe that the high-quality samples and database with detailed information will become the cornerstone of hepatology research, particularly in studies of diagnosis and new treatments for HCC and other liver disease.

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