and up scaled to have pT4. Accordingly, at least 2/3 of the MRI staged T4 tumours before treatment still were pT4 after multimodal treatment.
Conclusions: The tumours were downsized, but to lesser amount downstaged. If cure is the goal of the treatment, extended TME as *en-bloc* resections has to be performed. It is necessary to remove tumour as shown in pre-treatment MRI, as well as tumour, fibrosis and mucus as shown in MRI after post neoadjuvant treatment. MRI assisted pathology is an important option for better T-stage classification in advanced tumours, and essential for planning the extent of the surgical resection.

6016 POSTER

One hundred cases of delayed coloanal anastomoses: the end of diverting stoma following total mesorectal excision?

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Background: Anastomotic leakage is the main drawback from rectal cancer surgery. Coloanal anastomosis with a J-pouch is protected by a diverting stoma in case of preoperative radiotherapy. The leakage rate is between 4 and 20% in the literature. This study aimed to assess the results of a pull-through procedure after total mesorectal excision (TME) followed by delayed coloanal anastomosis (DCA) without diverting stoma for mid and low rectal cancer, in terms of oncologic results, postoperative morbidity and mortality, and functional outcomes.
Methods: From May 2000 to October 2008, patients with mid and low rectal cancer underwent pull-through procedure with TME followed by DCA in two universitary centres. Patients with T3, T4 or N+ disease were treated with preoperative radiotherapy. Patient's data were prospectively collected in a database which was retrospectively analysed.
Results: One hundred patients with tumours at a median distance of 5 cm (range 2−12) from the anal verge underwent this surgical procedure.
Seventy-five patients (75%) underwent laparoscopy and twenty-five patients (25%) underwent open route surgery.
The rate of complete microscopic resection (R0) was 96.4%. The actuarial overall and disease-free survivals were 81% and 66% at five years respectively. The postoperative mortality rate was 3%. The overall postoperative morbidity rate was 39% with 22 surgical complications including 10 pelvic sepsis requiring 7 diverting stoma (4 temporary and 3 definitive). After the second postoperative year, more than 70% of the patients had good functional outcomes (Wexner score <10).
Conclusion: In view of the oncologic results, postoperative morbidity and mortality, and functional outcomes, we can conclude that the pull-through procedure with TME followed by DCA is a safe and effective sphincter-preserving procedure that avoids a preventive diverting stoma for patients with mid or low rectal cancer. A prospective multicentric phase 2 will be launched in a near future.

6017 POSTER

Retrospective analysis of resected primary colorectal cancer reveled no correlation b/w node harvest and node involvement

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Background: Lymphadenectomy in colorectal cancer is believed to be a critical component concerning prognosis and survival of patients. The aim of this study was to analyze the relationship between the number of lymph nodes harvested (LNH) and the number of lymph nodes involved (LNI), at the histological examination of the specimens of resected primary colorectal cancer (CRC) at our unit.
Materials and Methods: The study period is Jan 2002 – Dec 2006 inclusive (5 years). The data was obtained from medical records, pathology and radiology. The patient inclusion criteria were resection of primary CRC (curative or palliative intent) including synchronous or metachronous cancer. Exclusion criteria were recurrent CRC, cancer not operated, cancer not resected (stoma-only, open-close) and endomucosal resection. LNH and LNI were obtained. The data were analyzed and also compared with the literature and the national audit.
Results: Over the five-year study period, 142 resections for primary CRC were performed on 141 patients (one metachronous). Mean number of resections per annum was 28. There were 86 (60.5%) colonic and 56 (39.5%) rectal cancers. There were 70 (49.3%) anterior resections. M:F ratio was 0.97:1. Median age was 71 years for colonic and 69.5 years for rectal cancers. Eighty eight percent of resections were elective (OR = 2.2 RR = 1.14 p = 0.003 compared to the national audit). Adenocarcinoma NOS constituted 94% of all histology results (5% mucinous and 1% signet ring). Median CRM was 7.5 mm (mean = 8.8 mm). The CRM involvement was 12.7% for all CRC and 16% for rectal cancers. The LRM involvement was 1.5%. Median overall LNH was 12, (mean = 13 p = 0.08 when compared to the recommended LNH of 12). Median LNH for rectal cancers = 11 and for colonic cancer = 13. There were 11 (14%) APRs compared to 70 (86%) sphincter-saving operations from a total of 83 rectal resections. 84%of resections were R_0. The 30-day all-cause mortality was 4.3%. Actuarial survival curve demonstrated 17.6% chance of metastasis at presentation, all-stage 3-year disease-free survival (DFS) of 67% and of 82% for stages I-III (T_{any} N_{any} M_0). CEA relapse as a marker of disease recurrence (available for n = 125) revealed 3-year DFS=71%. When correlation was determined between LNH and lymph node involvement, it revealed a low correlation (r = 0.159 p = 0.06) which was statistically insignificant. When the national audit calculated the same relationship among its much larger sample the results were the same (r = 0.152 p = 0.001) and had achieved statistical significance.
Conclusions: LNI as a function of tumour and host behaviour is of prognostic significance whereas LNH may be a marker of 'pathologist's diligence' at the histological examination and therefore a quality assurance (QA) tool.

6018 POSTER

Multimodal preoperative evaluation in surgical decision-making for rectal cancer: a randomized controlled trial

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Background: Multimodal preoperative evaluation (MPE) is a novel strategy for surgical decision-making, incorporating the transrectal ultrasound (TRUS), 64 multi-slice spiral computer tomography (MSCT) and serum amyloid A protein (SAA) for rectal cancer. The MPE system uses TRUS for T staging, MSCT for M staging, and assesses N stage based on MSCT with SAA for identification. This trial is to determine the accuracy of MPE in preoperative staging and role in surgical decision-making for rectal cancer.
Material and Methods: 225 participants histologically proved rectal cancer with tumor height (proximal from dentate line) less than 10 cm were randomly assigned into three arms in the ratio 1:1:1, according to a computer-generated randomisation list. Arm A (MPE) was multimodal staged by the combination of MSCT, TRUS and SAA. Arm B (MSCT+SAA) was staged by MSCT and SAA. Arm C (MSCT) was staged only by MSCT. The primary endpoints were the accuracy of preoperative staging and expected surgical procedures. The secondary endpoint was correlation between final surgical procedures and clinicopathological factors.

Table 1: The primary endpoints of three arms

Endpoints	Arm A *n* = 74	Arm B *n* = 72	Arm C *n* = 72	Arm A vs. B	Arm A vs. C	Arm B vs. C
Accuracy of preoperative T staging	94.6%	77.8%	80.6%	P = 0.003	P = 0.010	P = 0.682
Accuracy of preoperative N staging	85.1%	84.7%	69.4%	P = 0.944	P = 0.023	P = 0.029
Accuracy of preoperative M staging	100%	100%	100%	P = 1.000	P = 1.000	P = 1.000
Accuracy of preoperative TNM staging	82.4%	81.9%	70.8%	P = 0.939	P = 0.097	P = 0.116
Accuracy of surgical decision-making	96.2%	88.9%	80.6%	P = 0.106	P = 0.001	P = 0.087

Results: The accuracies of preoperative T, N, M and TNM staging were 94.6%, 85.1%, 100% and 82.4% in arm A, respectively; 77.8%, 84.7%, 100% and 81.9% in arm B; 80.6%, 69.4%, 100% and 70.8% in arm C. The analysis showed statistical difference in the accuracy of T staging between arm A and B (P = 0.003), arm A and C (P = 0.010). Accuracy of preoperative