

greater in the "no omentum" group (16/28 patients, 57.14%), compared with the "omentum" group (5/15 patients, 33.33%) ( $P < 0.01$ ). No differences were observed regarding age, stage, incidence of radiotherapy, blood loss, length of stay, or mortality.

**Conclusion:** Use of the omentum as a primary flap, or in combination with a myocutaneous flap, in the reconstruction of complex perineal defects, is associated with a decreased incidence of postoperative complications, strongly supporting the use of the omentum in pelvic floor reconstruction. This work has been supported by a UICC International Cancer Technology Transfer Fellowship granted in 2010.

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POSTER

### Strategy for Synchronous and Multiple Liver Metastasis

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Surgical indications for resection of synchronous metastasis from colorectal cancer (CRC) and the optimal timing of hepatectomy are still controversial and widely debated.

**Patients:** Synchronous and multiple metastatic liver tumours were detected in 57 since May/2005. Our treatment policy has been to perform hepatectomy first, if the resection can be done with no limit on size and number of tumours. However, if curative resection is not, chemotherapy is begun first and timing for the possibility of a radical operation is planned immediately.

**Results:** (1) In 37 patients whose tumours were located only in the liver, primary tumour resection was performed first in 16 patients, and after tumour-decreasing by chemotherapy, operation was performed in 7 patients. In 20 patients in whom chemotherapy was performed first, after controlling the distant metastasis, hepatectomy was performed in 3 patients, and staged hepatectomy was performed in 10 patients.

(2) Recurrence was detected after hepatectomy in 75.0% of simultaneous resection cases and in 70.0% of staged cases. In the recurrence cases, early detection (within 6 months) after tumour resection occurred in 58.3% of the simultaneous and 14.2% of the staged.

(3) No differences in results of pre- and postoperative liver function tests were found between these groups, and duration of hepatectomy and blood loss were also similar. No deaths occurred, and one incidence of bile leakage was detected in each group.

(4) Median survival time (MST) and 2-year survival rate were significantly better in the hepatic resection cases than in the non-operated cases. There was no significant difference in MST or 2-year survival rate between simultaneous and staged cases.

(5) In 10 staged cases, length of chemotherapy had no effect on pre- or postoperative liver function test results, and survival curves.

(6) Repeat operation was performed for recurrence in 75% of the simultaneous and 14.3% of the staged cases. The average time between first and second operation was  $13.1 \pm 7.7$  months, and 2-year survival was 100%.

**Conclusion:** Neoadjuvant chemotherapy does not increase the risk of postoperative complications or the surgical difficulties of hepatectomy for colorectal metastases. Treatment strategies for these clinical conditions should include consideration of responsible administration of chemotherapy and surgery.

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POSTER

### Right Kocher's Incision – a Feasible and Effective Incision for Right Hemicolectomy

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**Background:** The choice of surgical incision in the abdomen is determined by access to the surgical field. The purpose of this study is to compare the right subcostal (Kocher's incision) and the midline incision, for patients undergoing right hemicolectomy, by focusing on either short- or long-term results.

**Materials and Methods:** Between January 1995 and December 2009, hospital records for 213 patients that had undergone a right hemicolectomy for a right-sided colonic carcinoma were retrospectively studied. 113 patients had undergone a right hemicolectomy via a right subcostal (Kocher) incision and 100 via a midline incision. Demographic details, operative data, recovery and oncological parameters were analysed. Wound complications, postoperative complications and the incidence of incisional hernias were also recorded.

**Results:** Demographic data were similar. The median length of the midline incision was slightly longer than the right subcostal incision (12 cm vs. 10 cm,  $p < 0.05$ ). No significant difference was noted regarding analgesia requirements. The duration of the surgery for the right subcostal incision

group was significantly shorter (median time 70 minutes vs 85 minutes,  $p < 0.001$ ), despite the fact that in four patients the right hemicolectomy was combined with segmentectomies of the right hepatic lobe for preoperatively diagnosed metastatic lesions. The Kocher incision group had a significantly shorter hospital stay (median time 5 days vs 8 days). All patients underwent wide tumour excision. According to the histopathological reports, clear resection margins were obtained in all cases (minimum length of resection margins was 5.7 cm distally for the right subcostal incision group and 5.8 cm for the midline incision group), whereas the median number of lymph nodes harvested was 14 for both groups. There was no significant difference in terms of early postoperative complications between the two groups. With regards to late postoperative complications, incisional hernias were recorded in two patients from the Kocher incision group (1.8%), and in six patients from the midline incision group (8%).

**Conclusions:** The right subcostal incision approach for right-sided colon cancer is technically feasible, safe and overall very well tolerated. It can achieve the same standards of tumour resection and surgical field accessibility as the midline approach, while reducing postoperative recovery.

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POSTER

### Stroma Production Within the Primary Tumour Correlates With Poor Survival for Stage I-II Colon Cancer Patients

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**Background:** Recent models on metastatic invasion focus on the tumour-"host" interface, in particular the role of the stromal tissue. There is a strong emphasis that CAF's (cancer-associated fibroblasts) are important promoters for tumour growth and progression. We anticipate that changes in the proportion of stroma in the primary tumour reflect progression. The intra-tumour stroma percentage has previously been reported by our group as a strong independent prognostic parameter. CRC patients with a high stroma percentage within the primary tumour have a poorer prognosis. Validation of this parameter in an independent series was necessary, and it has therefore been tested in a cohort of patients from the VICTOR trial (Vioxx in colorectal cancer therapy: definition of optimal regime as anticancer intervention involving selective COX-2 inhibitors).

**Methods:** Tissue samples from 710 patients participating in the VICTOR trial were analyzed for their stroma percentage using conventional microscopy. Each sample was analyzed by two individual observers in a blinded manner. Tissue samples consisted of 5 µm Haematoxylin and Eosin (H&E) stained sections from the most invasive part of the primary tumour. Stroma-high (>50% stroma) and stroma-low (≤50% stroma) groups were evaluated with respect to survival time.

**Results:** Overall and disease free survival times (OS and DFS) were lower in the stroma-high population (OS  $p < 0.0001$ , HR = 1.96; DFS  $p < 0.0001$ , HR = 2.15). Within the total patient population the five year OS was 69.0% versus 83.4% and DFS 58.6% versus 77.3% for stroma-high versus stroma-low patients. For patients with stage II CRC, OS and DFS were also lower for the stroma-high group (OS  $p = 0.034$ , H=1.95; DFS  $p = 0.005$ , HR = 2.04). The 5 year OS for this group was 79.8% versus 89.1% and for DFS 71.1% versus 83.3% for stroma-high versus stroma-low patients. Within the stage III CRC group, 5 year OS of 61.7% versus 76.1% was observed and for DFS 50.2% versus 69.4% (OS  $p = 0.019$ , HR = 1.61; DFS  $p < 0.0001$ , HR = 1.86) for stroma-high versus stroma-low patients.

**Conclusions:** This study validates the intra-tumour stroma ratio as an independent prognostic factor of CRC in an independent patient series. Patients with a high intra-tumour stroma percentage have a poorer prognosis. This parameter could be a valuable addition to current high-risk parameters such as TNM-status and MSI status used in routine pathology reporting.

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POSTER

### Modified Pseudocontinent Perineal Colostomy – a Special Technique

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**Background:** Innovative techniques created to restore gastrointestinal perineal continuity after abdominoperineal resection in patients with anorectal cancer include pseudocontinent perineal colostomy, in which the colon is pulled to the perineum and wrapped with a sleeve of stretched colon segment to act as a new sphincter.

**Objective:** We investigated perineal reconstruction with a modified pseudocontinent perineal colostomy technique.

**Design:** Prospective cohort study.