

of ascites, distant metastases or peritoneal involvement were excluded. Likewise cases with macroscopic serosal or peritoneal involvement detected intraoperatively and those patients undergoing palliative resection and/or bypass surgical procedures were excluded. At laparotomy, 200 ml of normal saline were instilled into the peritoneal cavity and lavage fluid was collected. The procedure was repeated after the resectional surgery just before the abdomen was closed. Both the samples were centrifuged and stained for malignant cells. The detailed histopathological report of the resected specimen was also recorded.

Results: There were 6 cases of well differentiated, 10 cases of moderately differentiated and 6 cases of poorly differentiated adenocarcinoma in our series. 2 out of the 6 cases of poorly differentiated carcinoma showed signet ring appearance which is indicative of a poorer prognosis. There were 3 cases of T₃N₁M₀ of which two patients had positive peritoneal cytology in both the preresection and postresection samples. Both patients had signet ring type poorly differentiated adenocarcinoma. None of the other cases had positive peritoneal cytology. None of our patients converted from negative to positive peritoneal cytology after surgical resection.

Conclusions: We conclude that presence of free cancer cells in the peritoneal cavity as measured by peritoneal washing is a measure of poor histology and advanced disease and may be present even without gross peritoneal involvement and/or ascites. We were unable to demonstrate spillage of tumour cells in the peritoneal cavity during resectional surgery and are of the opinion that the fears in this regard may be unfounded.

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POSTER

Surgical Resection of Liver Metastases From Colorectal Carcinoma – Survival According to Radical Liver Resection and to Prognostic Factors

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Background: Currently, surgical resection of the liver metastases is considered the most effective therapy for liver metastases from colorectal carcinoma (LMCC) patients, and is potentially the only curative treatment. Several large studies have reported OS rates up to 60% and 5 year DFS of 43%.

Purpose: The aim of the present study was to assess: 1) the survival of all 59 patients, who underwent resection for LMCC from 2003 to 2010, referred to the General Surgery and Liver Transplantation Unit, “Brotzu” Hospital, Cagliari, Italy; 2) moreover, only the 35 patients with a post-operative follow-up of at least 3 years after liver radical (R0) resection were assessed comparing survivors and deceased patients by χ^2 test on the basis of the prognostic factors shown in the Table.

Results: The OS rates of all 59 patients were 92%, 66%, 50%; at 1, 3 and 5 years, respectively; and DFS rates were 87%, 58%, 43%, at 1, 3 and 5 years, respectively with a postoperative mortality of 3%. For the second aim of the study, a statistically significant difference was observed between the two groups (survivors vs deceased): 100% of deceased patients had synchronous metastases vs 61% of survivors ($p=0.0351$); 100% of deceased patients had metastases <5 cm vs 56% of survivors ($p=0.02$).

	Patient 3 year follow-up	Survivors (%)	Deceased (%)	p value (χ^2)
Primary tumour location				0.68
Colon	29/35 (83%)	19/23 (82%)	10/12 (83%)	
Rectum	6/35 (17%)	4/23 (18%)	2/12 (17%)	
Dukes' Stage				0.1
B	1/35 (3%)	1/23 (4%)	0/12 (0%)	
C	6/35 (17%)	6/23 (26%)	0/12 (0%)	
D	28/35 (80%)	16/23 (70%)	12/12 (100%)	
Number of metastases				0.9
1	13/35 (37%)	9/23 (39%)	4/12 (33.3%)	
2-3	12/35 (34%)	8/23 (35%)	4/12 (33.3%)	
>3	10/35 (29%)	6/23 (26%)	4/12 (33.3%)	
Location of metastases				0.83
Unilobar	21/35 (60%)	14/23 (61%)	7/12 (58%)	
Bilobar	14/35 (40%)	9/23 (39%)	5/12 (42%)	
Time of occurrence of metastases				0.0351
Synchronous	26/35 (74%)	14/23 (61%)	12/12 (100%)	
Metachronous	9/35 (26%)	9/23 (39%)	0/12 (0%)	
Size				0.02
<5 cm	25/35 (71%)	13/23 (56%)	12/12 (100%)	
≥5 cm	10/35 (29%)	10/23 (44%)	0/12 (0%)	
Serum CEA levels				0.14
<60 ng/ml	29/35 (83%)	17/23 (74%)	12/12 (100%)	
≥60 ng/ml	6/35 (17%)	6/23 (26%)	0/12 (0%)	
Extrahepatic metastases				0.89
Yes	4/35 (11%)	2/23 (9%)	2/12 (16%)	
No	31/35 (89%)	21/23 (91%)	10/12 (84%)	

Conclusions: Our study shows that if radical (R0) liver resection was achieved, the number of metastases, their location (unilobar vs bilobar), and the occurrence of extrahepatic metastases did not affect 3 year survival. Conversely, the synchronous vs metachronous metastases were a clear adverse prognostic factor.

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POSTER

Extended Surgery for Locally Advanced Primary and Recurrent Rectal Cancer – Experience of 30 Pelvic Exenterations

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Background: Currently, about 15–30% of primary rectal cancer patients experiencing with the locally advanced (T4) tumours. On another hand, local recurrence after curative surgery for primary rectal cancer occurs in 4–20% of cases. For locally advanced rectal tumours (primary as well as recurrent), the extended surgery including pelvic exenterations seems to be necessary component of radical treatment.

Materials and Methods: Overall 30 patients with locally advanced rectal tumours were included. 13 pts (5 m, 8 f) were presented with primary locally advanced rectal cancer (Group A), 17 pts (7 m, 10 f) – with recurrent rectal tumours (Group B). The mean age of pts was 52.3±14.4 years (28–78) in the Group A, and 54.8±9.2 years (32–70) in the Group B.

The tumours involving rectum were observed in all 30 patients, bladder and prostate – in all men, vagina – in all women, intestine – in 6 pts, sacral fascia – in 5 pts. Preoperative radiotherapy was performed in 7 pts of Group A and in 4 pts of Group B.

The total pelvic exenteration (TPE) was performed in 14 pts (6 – Group A, 8 – Group B). Posterior pelvic exenteration (PPE) was performed in 16 pts (7 – Group A, 9 – Group B). All 16 recurrent cancer patients underwent the APE of rectum or rectal stump. Sphincter-preserving (supra-levatoric) pelvic exenteration was performed in 5 pts of Group A. The orthotopic neo-bladder after TPE was performed in 4 male pts of Group A and 1 of Group B. Other pts after TPE underwent the Bricker procedure (6 pts) and urethrectomy (3 pts).

Results: Resections were considered R0 in 23 (76.7%) pts, R1 in 7 (23.3%) pts. Postoperative complications occurred in 16 (53.3%) pts, 4 of them were re-operated. There was one postoperative death, related to the intraperitoneal hemorrhage. Thus, postoperative morbidity was 53.3%, mortality – 3.3%. The follow-up period ranged from 10 to 49 months after surgery (median – 25 months). Among the traced 27 pts, 25 (92.6%) are still alive, 22 (81.5%) of them are free of disease. 3 (11.1%) pts (1 – Group A, 2 – Group B) after R1 resections experienced with re-recurrences. 2 pts dead of metastatic disease in 12 and 18 months after surgery without any evidence of local relapse.

Conclusion: Multivisceral resections, including pelvic exenteration, are an option to cure patients with locally advanced primary and recurrent rectal cancer. CRM+ is a predictor of high risk of re-recurrence, thus, R0 resection must be performed if it could be achieved.

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POSTER

Reconstructions of Perineal Defects After Abdominoperineal Resection or Pelvic Exenteration

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Background: Surgery for advanced or recurrent rectal cancer often results in complex defects associated with high complication rates and morbidity for the patients. This study assesses the usefulness of the omentum in the reconstruction of complex perineal defects, following abdominoperineal resection or pelvic exenteration, for anorectal malignancy.

Patients and Methods: Between 2005 and 2010, 43 patients (mean age: 54 years) with anorectal malignancy underwent abdominoperineal resection (n=36) or pelvic exenteration (n=7) and were reconstructed by primary repair alone (n=16), primary repair with omentum (n=8), myocutaneous flap alone (n=12), or myocutaneous flap with omentum (n=7). Patients with and without omental flaps were compared by Student t test. Omental flaps were based on a single pedicle, tunneled in the retrocolic plane lateral to the ligamentum of Treitz, and transposed across the sacrum to the pelvic floor. In total, 15 patients had pelvic floor and perineal reconstruction with the omentum, and 28 patients had reconstruction without the omentum.

Results: Incidence of major pelvic complications (abscess, urinoma, deep vein thrombosis, flap dehiscence, hernia, bowel obstruction, fistula) was