The combined treatment modalities with Subtotal peritonectomy and HIPEC as the treatment of choice in primary peritoneal tumours.


Purpose: Irrespective of the increased aggressiveness of surgical treatment and implication of the new drugs in clinical practice the long term results of primary peritoneal tumours (peritoneal mesothelioma, pseudomixoma peritonei) remain dismal. The standard treatment options with systemic chemotherapy cannot alter their dismal prognosis.

Materials: Between 1.1.06 and 31.03.10 - 24 patients with primary peritoneal tumours of different origin were treated in Russian National Cancer Center of RAMS and RF President Administration Clinical Hospital. Mean age was 47,8±11,9 years with interval from 20 till 69 years. The absolute majority were women – 20 cases (83,3%). The main tumour entity was peritoneal pseudomixoma – 17 cases (in 7 cases peritoneal carcinomatosis from ovarian primary (29,2%)). In 6 cases peritoneal mesothelioma was diagnosed. All pts were surgically treated and in 19 cases optimal (CC-0 – 16 cases 66,7%) and suboptimal (CC-1 – 3 cases 12,5%) cytoreduction was achieved. CC-2 was in 2 cases (8,3%). HIPEC was performed in all cases. HIPEC was performed for 90 min with the average temperature 43,5 - 44,0 C. There were no intraoperative complications.

Results: In the absolute majority of pts combined surgical procedures were done – 21 cases (87,5%) mainly with splenectomy (12 cases) and cholecystectomy (6 cases). Postoperative complications were observed in 11,7% cases, though uneventful recovery was in 18 cases (78,3%). No postoperative mortality was observed.

The survival (Kaplan-Meier) was estimated separately: in the whole group 1- and 2-y. survival was 100% with progression free 1- and 2-y. survival 86±13.2%. In 2 cases with primary peritoneal mesothelioma tumour relapse was diagnosed during the 1 year, though in 1 case second laparotomy with tumour excision and second HIPEC+EPIC was done – the pnt is alive for 36 month without recurrence. For the whole group and in the subgroups the median survival was not reached.

Conclusions: The HIPEC is a feasible procedure that does not increase the intraoperative and postoperative morbidity and mortality and obviously increases the long-term results in cases of primary peritoneal tumours. In selected cases HIPEC can be applied in cases with local relapse with good long-term results. Due to our data HIPEC combined with adequate surgical treatment (Subtotal peritonectomy ± organ resection) is the treatment of choice in cases of primary peritoneal tumours.