ELECTRO-HYPERTERMIA (EHT) AND HEPATIC ARTERIAL CHEMOTHERAPY (HAC) IN PATIENTS WITH LIVER METASTASES FROM GASTROINTESTINAL CANCER (GIC).

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Purpose.
HAC is a promising approach for the treatment of liver metastases from GIC. EHT have a direct anticancer effect and a synergistic activity by potentiating drug activity. We clinically examined 40 patients (pts) with unresectable metastatic liver cancer (MLC) from GIC who received EHT and HAC at our Division between January 2006 and December 2006. Aim of the current study was to define the toxicity and response to this combined therapy.

Methods and patients.
There were 25 males and 15 females. Patient ages ranged from 43 to 77 years, with a mean of 55 years. Primary cancers consisted of pancreatic cancer (14 pts), biliary tract or gallbladder cancer (12 pts), colorectal cancer (11 pts) and gastric cancer (3 pts). 25 pts were previously untreated, 15 pts received one or more previous chemotherapeutic treatments. Main inclusion criteria were PS ECOG 0-2, liver replacement by tumor <50%, T.bili. <2.0 AST/ALT <4 times the upper limit of normal. Treatment consisted of combined HAC with three days of EHT: the day before, the same day and the day after HAC. Every session of EHT was delivered using a radiofrequency generator of 13,56 Mhz for 60 minutes at 80-140 W equivalent to 41-45°. Patients received HAC cycles as follows: FLEC regimen (leanderfolin, 5-fluorouracil, epirubicin hydrochloride, carboplatin) for MLC from pancreatic origin, ECF regimen (epirubicin hydrochloride, cisplatin, 5-fluorouracil) for MLC from biliary tract or gallbladder, FEM regimen (5-fluorouracil, epirubicin hydrochloride, mitomycin-C,) for MLC from colorectal or gastric origin.
The pts received the drugs by a catheter placed into the celiac axis or the hepatic arterial through an inguinal access. Median number of cycles was 4 (1 - 6).

Results.
All pts are fully evaluable for toxicity. No relevant hematologic or extrahematologic (grade 3-4°) toxicity were observed. 5 pts complained of not relevant side effect due to EHT (local pain or burning) that were not of obstacle in carrying out the treatment. The response among pts was: 5 partial response, 17 stable disease and 18 progressive disease for an overall tumor growth control of 55%. From beginning of therapy 24 pts are alive.

Conclusion.
The combined therapy with HAC and EHT showes a high response rate without increasing toxicity in this group of pts with severe prognosis.