

# Hepatic arterial infusion chemotherapy for liver metastases from gastric cancer: an analysis in western patients

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## ABSTRACT

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**Aims and background.** The advantage of administering chemotherapy by hepatic arterial infusion is the achievement of high drug concentrations in the liver. Oxaliplatin, irinotecan and 5-fluorouracil are active agents in advanced gastric cancer. Therefore a retrospective analysis was performed to investigate the effects of these drugs administered by hepatic arterial infusion in heavily pretreated gastric cancer patients with predominant hepatic metastases. Very limited data about hepatic arterial infusion exist in western gastric cancer patients.

**Methods.** Seven patients with advanced gastric cancer were included in the retrospective analysis. All patients had proven progressive disease prior to initiation of hepatic arterial infusion. All had an ECOG performance status of  $\leq 2$  and had received at least two previous systemic chemotherapy regimens, including the combination of cisplatin/5-fluorouracil. Patients were given chemotherapy by hepatic arterial infusion: 5-fluorouracil, 600 mg/m<sup>2</sup>, together with folinic acid, 300 mg/m<sup>2</sup>/2 h, followed by oxaliplatin, 85 mg/m<sup>2</sup>/2 h, every 2 weeks.

**Results.** Fifty-four cycles of hepatic arterial infusion (range, 2-21) with a median treatment duration of 6 cycles were administered in 7 patients. The treatment was feasible and safe, no grade 3-4 toxicity was observed. One patient showed stabilization of liver metastases over 7 months. In 6 of the 7 patients there was radiologically proven progressive disease after a median treatment time of 10 weeks.

**Conclusions.** Chemotherapy by hepatic arterial infusion is modestly effective in heavily pretreated gastric cancer patients. Hepatic arterial infusion has a very favorable toxicity profile and can be safely administered even in elderly patients. It might be an additional therapeutic option and should be further investigated. The literature on hepatic arterial infusion in gastric cancer patients is reviewed. Free full text available at [www.tumorionline.it](http://www.tumorionline.it)

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**Key words:** gastric cancer, hepatic arterial infusion, liver metastases.

*Disclosure statement:* The authors declare that they do not have any affiliations that would lead to conflict of interest.

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