## **BMC Geriatrics**



Meeting abstract

Open Access

# Multimodal approach to liver neoplasm in elderly patients. A single center experience

D Iacovetta\*1,2, C Cellini¹,2, F Selvaggi¹,2, ES Kechoud¹,2, M Legnini¹,2, F Francomano¹,2 and P Innocenti¹,2

Address: ¹Istituto di Patologia Chirurgica, policlinico universitario "SS. Annunziata", Chieti, Italy and ²Scuola di specializzazione in chirurgia generale università degli studi "G. d'Annunzio", Chieti, Italy

\* Corresponding author

from XXI Annual Meeting of The Italian Society of Geriatric Surgery Terni, Italy. 4–6 December 2008

Published: I April 2009

BMC Geriatrics 2009, 9(Suppl 1):A68 doi:10.1186/1471-2318-9-S1-A68

This abstract is available from: http://www.biomedcentral.com/1471-2318/9/S1/A68

© 2009 lacovetta et al; licensee BioMed Central Ltd.

#### Introduction

Surgical therapy remains the gold standard for treatment of liver neoplasms. In the last 20 years we assisted to an increase of survival in patients with a diagnosis of hepatocellular carcinoma (HCC), according to screening programs, and a multimodal therapeutical approach. In the last years it was an increase of elderly patients with HCC cause of the increase of infection of HCV and an increase of geriatric patients; together with HCC, hepatic metastases represent the main topics of our investigation.

Is justified an aggressive approach to liver neoplasms in the elderly? Recent studies show as elderly is not a contraindication to major hepatic surgery. The aim of this study is to evaluate the effective advantage of multimodal approach to hepatic surgery in elderly population (70 years old and older).

#### Materials and methods

Between January 2001 and September 2008 a total of 150 patients with hepatic lesions (hepatocellular carcinoma – HCC, liver metastases and tumor of biliary tract) we admitted in our department to undergo to multimodal treatments. Fifty-three (53) of them are 70 years old or older (female to male ratio = 12:41. Mean age: 74.9 years median: 75.0 years. Max value: 87 years).

Preoperative examinations include abdominal ultrasounds, abdominal TC scan, RMN when rescued and AFP,

CA 19-9 levels. We considered patients 70 years of age, post-operative complications, diagnosis, extension of resection (major resection, minor resection, resection of nodules), overall and disease free survival at 48 months. Categorical variable were analyzed by chi-squared test; survival was calculated using Kaplan Meyer method and compared with log-rank test. Differences were considered to be statistically significant when p < 0.05.

Liver resection was considered treatment of first line. We routinely effectuated IOUS (anatomical resection >non anatomical). Median follow up was 48 months.

#### Results

There were 12 female and 41 male patients with a median age of 75 years. Of them 21 were treated for liver metastases, 26 for HCC, 6 for tumors of biliary tract. The 19% underwent to major resection, 60% to minor resection and 21% resection of nodules.

Post-operative complications occur in older patients as in younger. The incidence of post-operative complications is similar between the groups of patients (test del  $\chi^2$  not statistically significant).

There is not difference in overall survival and disease-free survival between patients with 70 years old and older and younger patients (p: n.s. log-rank test).

### **Discussion**

The safety of hepatic resection in elderly patients is still debated.

Any studies concluded that hepatic resection can be safely performed in patient 70 years old or older. Other study confirmed that an aggressive surgical approach for colorectal metastases is justified. In other series Figueras et al. have suggested that elderly patients, undergoing liver resection, have higher post-operative morbidity and mortality rates.

The only absolute contraindication to hepatic resection is the impossibility to performed curative resection.

The presence of bilobar metastases, extraepatic metastases, recurrence of colon cancer, limited carcinomatosis are not absolute contraindications for hepatic resection but only a bad prognostic factors such the resection margin.

Multimodal treatments (systemic and local chemioterapy, chemioembolization, termoablation) performed during, before or after surgery have a role in the in curative and palliative treatment. In our series geriatric patients received the same treatment and the same algorithm than in the younger patients. The results in term of post-operative complication, 48 months overall survival (HCC 79.4%, MTS 26.4%, biliary tract 20.0%) and disease free survival (HCC 73.3%, MTS 26.4%, biliary tract 20.0%) show as multimodal treatments can be performed with safety in patients 70 years old and older.

Treatment of elderly patients, in term of optimizing their surgical outcomes, is one of the most important challenge for the "future surgery".

Publish with **Bio Med Central** and every scientist can read your work free of charge

"BioMed Central will be the most significant development for disseminating the results of biomedical research in our lifetime."

Sir Paul Nurse, Cancer Research UK

Your research papers will be:

- available free of charge to the entire biomedical community
- peer reviewed and published immediately upon acceptance
- cited in PubMed and archived on PubMed Central
- ullet yours you keep the copyright

Submit your manuscript here: http://www.biomedcentral.com/info/publishing\_adv.asp

