

Meeting abstract

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## Treatment with radiofrequency thermoablation of elderly patients suffering from hepatocarcinoma (HCC)

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### Background

In elderly patients hepatocarcinoma is often not treatable by surgery in consequence of their reduced tolerance to liver resection for the concomitant cirrhosis, which frequently is the cause of death. In these patients radiofrequency thermoablation allows to obtain tumor necrosis with minimal sacrifice of liver parenchyma surrounding the tumor and satisfactory therapeutic results.

### Materials and methods

From 2004 to 2008, 30 over 70 years aged patients suffering from  $\leq 5$  cm HCC were treated with radiofrequency thermoablation. All patients had a poor performance status for comorbidity and moderate or severe liver failure (CHILD B-C). They were treated under general anesthesia with 9 hooks RITA up to 105°C.

We assessed percentage of induced tumor necrosis, time of intervention, complications, time of hospitalization, patient compliance, cost of procedures. All patients were submitted monthly to clinical and ultrasound assessment to evaluate possible recurrence of disease. At 6 and 12 months, CT with and without contrast was carried out.

### Results

The average follow-up was 16 months (range 8–42). The complete tumor necrosis was achieved in 25 patients, (in 19 cases with a single intervention and in 6 cases with two intervention). In the remaining 5 patients only a partial necrosis was obtained, and they were submitted to a second treatment. No serious complications (haemorrhage, hemoperitoneum, acute liver failure) were detected in the

post-operative period. The average time of the procedure was 15 minutes (range 12–60). All patients were discharged the day after the treatment and expressed satisfaction about this technique. The total costs were less than surgical treatment (less time of hospitalization and less complications).

Of the 30 treated patients, 6 died for progression of cirrhosis; one patient treated with two interventions suffered after 5 months from hemoperitoneum for spontaneous rupture of the lesion and was treated with drugs. Ten patients received a further treatment after near one year, for appearance of new tumor nodules thirteen patients still do not show signs of cancer progression.

### Conclusion

Radiofrequency thermoablation is a valid method for the treatment of HCC in elderly patients with high surgical risk, because is effective repeatable, with low incidence of peri and post-operative complications.