

**E36**

Laparoscopic Liver Resection Versus Percutaneous Radiofrequency Ablation For Single Hepatocellular Carcinoma ($\leq 3\text{cm}$)

Ji Su KIM¹, Dai Hoon HAN¹, Beom Kyung KIM², Do Young KIM², Jin Sub CHOI¹, Gi Hong CHOI¹

¹Division Of Hepatobiliary And Pancreatic Surgery, Yonsei University College Of Medicine, REPUBLIC OF KOREA

²Department Of Internal Medicine, Yonsei University College Of Medicine, REPUBLIC OF KOREA

Background : Laparoscopic liver resection (LLR) and Percutaneous radiofrequency ablation (RFA) are ideal treatment options for single hepatocellular carcinoma (HCC). As laparoscopic technology advances, LLR is now less invasive and safer than RFA comparable. Therefore, this study aims to compare the long-term survival outcomes of the two treatment and to suggest appropriate treatment criteria.

Methods : From 2008 to 2019, a total 345 newly diagnosed patients with single HCC $\leq 3\text{cm}$ underwent RFA or LLR as first-line therapy. A total of 272 patients were analyzed retrospectively, excluding those with a Platelet count less than 100,000.

Results : A total of 123 and 149 patients underwent RFA and LLR, respectively. RFA showed significantly higher marginal recurrence rate than LLR. (22 versus 0, $p < 0.0001$). LLR has better overall survival (OS) and recurrence free survival (RFS) ($p < 0.0001$, $p < 0.0001$). Cox regression analysis found the treatment methods as the unique variable statistically significant for OS and RFS [hazard ratio (HR) 95% confidence interval (CI): 0.122-0.490, $p < 0.0001$; HR 95% CI: 0.201-0.627, $p < 0.0001$].

Conclusions : LLR showed better outcomes in overall survival and recurrence free survival. In cases where RFA is difficult to perform or if the possibility of local recurrence is high, it is recommended to consider LLR for single HCC ($\leq 3\text{cm}$).

Corresponding Author : **Gi Hong CHOI** (CHOIGH@yuhs.ac)