

## MICROWAVE ABLATION VERSUS LIVER RESECTION FOR EARLY HEPATOCELLULAR CARCINOMA IN PATIENTS WITH BORDERLINE LIVER FUNCTION (MAVERL STUDY)

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**Background** : Studies comparing microwave ablation (MWA) and liver resection are lacking. Earlier propensity score matching study reported better survival by MWA in patients with borderline liver function. We propose a randomized controlled study to compare the treatment efficacy of microwave ablation to liver resection for hepatocellular carcinoma (HCC) in patients with borderline liver function.

**Methods** : This is a prospective randomized study. Patients with borderline liver function (as defined by Child's A and ALBI 2) and HCC amenable to both liver resection and MWA were randomized. Overall and disease-free survival were compared between the two groups. Other perioperative outcomes were also analyzed.

**Results** : From June 2018 to May 2021, 76 patients were randomized. MWA was associated with significantly shorter operation time, less blood loss, lower post-operative complication rate, and shorter hospital stay. There was no significant difference in overall survival between the two groups ( $p = .318$ ). However, MWA was associated with a shorter disease-free survival ( $p = .014$ ).

**Conclusions** : Liver resection offered superior disease-free survival to MWA in HCC patients with borderline liver function.

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