MICROWAVE ABLATION THERAPY VERSUS RADIOFREQUENCY ABLATION FOR HEPATOCELLULAR CARCINOMA IN CARDINAL SANTOS MEDICAL CENTER: A RETROSPECTIVE COHORT

Significance

In the Philippines, hepatocellular ccarcinoma has a prevalence rate of 7.8% for hepatocellular carcinoma with mortality rate of 25%. Surgical resection has been the treatment among Filipino patients with hepatocellular carcinoma. However, with cases of poor post-operative recovery and post resection complications, local ablation techniques were developed including Radiofrequency Ablation (RFA) and Percutaneous Microwave Ablation (PMAT) Therapy. This study aims to compare the clinical outcomes of patients with Hepatocellular Carcinoma who underwent RFA or PMAT.

Methodology

Chart review of patients who underwent RFA or PMAT from January to December 2018 was done. Data including pre- and post-procedural liver function tests, Alpha-feto protein (AFP), and imaging studies were reviewed. Included in this study are adult patients with primary hepatocellular carcinoma. Patients with metastatic liver masses were excluded. Data was then encoded and analysed using Microsoft Excel 2016 Data Analysis ToolPak

Results

Sixteen (16) patients with Primary Hepatocellular Carcinoma were included in the study. Improvement in AFP levels were statistically significant in the 1-year follow up for patients who underwent RFA *(p=0.026)* and PMAT *(p=0.031)*. There was a statistically significant improvement in INR at 1 year follow up in patients who underwent RFA (p=0.010). For patients who underwent PMAT, a trend towards improvement in INR was also noted (*p=0.056*).

Conclusion

Percutaneous Microwave Ablation Therapy is a potentially viable treatment option for patients with primary hepatocellular carcinoma. The decline of alpha fetoprotein (AFP) in the 1-year follow up for RFA and PMAT indicates potential benefit in this novel modality. Further studies, with larger population is recommended.

Keywords: Retrospective cohort, Primary Hepatocellular Carcinoma, Microwave Ablation Therapy