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Learning advanced image guided therapies in hepatocellular carcinoma

Hepatocellular carcinoma (HCC) is the most common primary liver cancer and the incidence is on the rise due to the increase in the incidence of viral hepatitis, alcoholism and non-alcoholic fatty liver disease. Surgery and liver transplantation are the definitive curative treatment options for HCC. However, curative surgery is frequently not possible in view of advanced underlying liver disease or portal hypertension. Liver transplantation is infrequently performed and not available to all patients due to the lack of awareness and standard for organ donation and due to the cost. Hence, controlling the disease by performing image guided therapies is the available treatment option.

The image guided treatments for HCC include transarterial chemoembolization and radioembolization and ablations like radiofrequency and microwave ablation. These treatments help in disease control and act as a bridge till liver transplantation is done. In addition to interventions, imaging with advanced techniques is also important in the diagnosis as well as follow up of these patients. MD Anderson Cancer Center in Texas has a state-of-the-art fully equipped Radiology department which performs all the radiological interventions required in the management of HCC.

I have the basic skills to perform procedures like TACE and radiofrequency ablation and interested in learning about the procedures like TACE with beads, balloon occluded TACE, radioembolization and microwave ablation. During my fellowship, I intend to learn these advanced radiological interventions and the imaging techniques performed in the management of patients of HCC.