Two mutatons linked to common liver cancer, may help target treatments

Two genetic mutations in liver cells may drive tumor formation in intrahepatic cholangiocarcinoma (iCCA), the second most common form of liver cancer, according to a research published in the July issue of the journal Nature.

A team led by the Icahn School of Medicine at Mount Sinai and Harvard Medical School has discovered a link between the presence of two mutant proteins IDH1 and IDH2 and cancer. Past studies have found IDH mutations to be among the most common genetic differences seen in patients with iCCA, but how they contribute to cancer development was unknown going into the current effort.

iCCA strikes bile ducts, tube-like structures in the liver that carry bile, which is required for the digestion of food. With so much still unknown about the disease, there is no first-line, standard of care and no successful therapies.

"iCCA is resistant to standard treatments like chemotherapy and radiation," said Josep Maria Llovet, MD, Director of the Liver Cancer Program, Division of Medicine, Icahn School of Medicine at Mount Sinai, and contributing author. "Understanding the molecular mechanism of the disease is the key to finding a treatment that works."

Read the full, original story: Gene mutation findings may lead to treatment for liver cancer