Intrahepatic cholangiocarcinoma (ICC) is the second most common primary liver cancer and is known to be about 10% of primary liver cancer and also 10% of all bile duct cancer. However the incidence of ICC in Korea in 2009 was about 3,000 cases and it comprises about 18.8% of all primary liver cancer. And the proportion of ICC among primary liver cancer has been increasing since 2005 (14.4%). Another interesting point is, the annual incidence of ICC in 2009 was higher than that of extrahepatic bile duct cancer (2,660 cases) or gallbladder cancer (2,122 cases). Although Resection is the only method of cure for ICC, there is no consensus about the surgical extent including hepatectomy and lymph node dissection.

For hepatectomy with or without bile duct resection, the most important point is microscopically complete resection with negative resection margin (R0 resection). There is no long-term survivor in R1-2 resection. In the mass-forming type, the mode of cancer spread, like HCC is mainly through intrahepatic portal vein and most recurrence occurs in liver. Therefore the theoretical advantages of anatomic resection or wide resection margin seems effective, however there is no powerful study to clarify the advantage of anatomic resection in the mass-forming ICC. In the periductal infiltrative or mass-forming+periductal infiltrative ICC, as the mode of spread is mainly through lymphatics along the Glissonian sheath, relatively major hepatectomy is more needed with radical bile duct resection. As with the mass-forming ICC, the most important principle is R0 resection.

For lymph node dissection, there is no consensus about whether lymph node dissection could improve the survival or what the adequate range of lymph node dissection is. Some studies reported there is no survival difference between patients with or without lymph node dissection. In other studies however, lymph node dissection was reported to be effective in some lymph node (+) patients because there is some long-term survivor in lymph node (+) ICC patients. In terms of extent of lymph node dissection, many Japanese surgeons advocated the extended lymph node dissection including lymph node groups of hepatoduodenal ligament, common hepatic artery, celiac axis, retropancreatic area, and even paraaortic area. In the ICC of left liver, lymph node groups of lesser curvature and cardia were said to be included. However there is no powerful comparative studies concerning the extent of lymph node dissection. As many lymph node metastasis in ICC were reported to occur beyond the hepatoduodenal ligament, radical lymph node dissection seems to have the theoretical advantage to eliminate the metastatic lymph node and also have the chance of cure.

ICC has known to be rare disease however it is not the true story. ICC composes nearly 20% of primary liver cancer and outnumbers the extrahepatic bile duct cancer in Korea. Therefore well-disigned clinical studies about the surgical extent of ICC are required now!

References