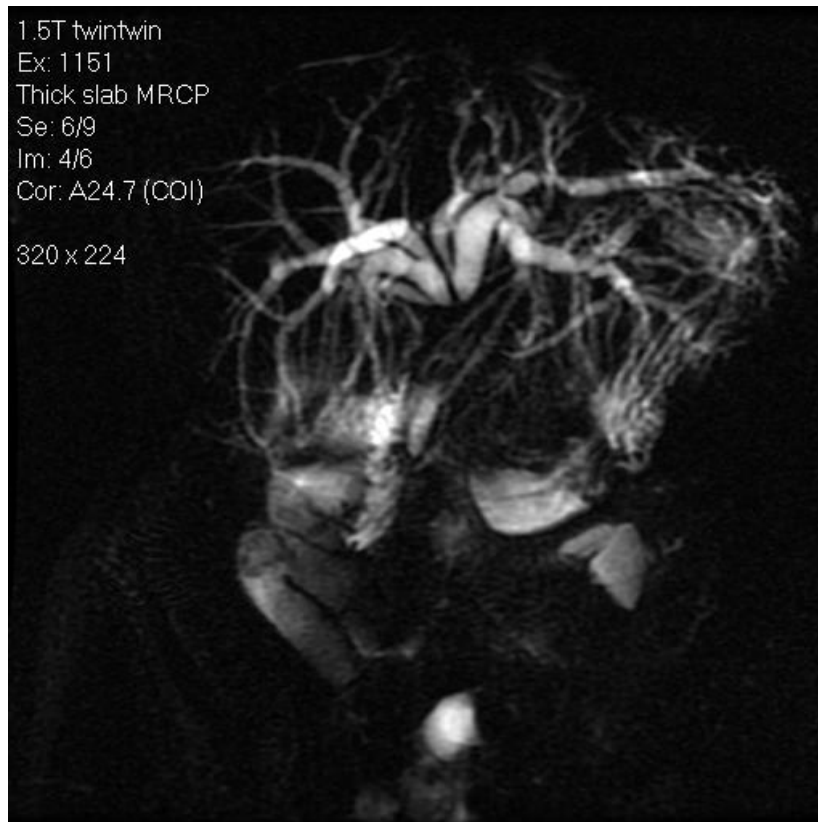


Which of the following is **NOT** associated with the development of the abnormality seen in the figure?

- a. Cigarette smoking
- b. *Opisthorchis viverrini* infection
- c. Hepatitis B infection
- d. Biliary-enteric anastomosis
- e. Hepatitis C infection



ANSWER: C. Hepatitis B infection

Explanation: Hilar cholangiocarcinoma, as depicted in the MRCP image, is classically associated with chronic biliary inflammation caused by PSC/IBD and liver fluke infestation. Congenital biliary cysts, hepatolithiasis and biliary-enteric anastomoses have been associated with CCA due to chronic inflammations/infection of the biliary tree. Cigarette smoking, alcoholic liver disease, cirrhosis and HCV infection have been epidemiologically linked to CCA.