

Patients may have no symptoms, particularly when the cancer is at an early stage. Occasionally biliary tract cancers are diagnosed incidentally when a CT or MRI scan is done for another reason, or when the gallbladder is removed due to symptomatic gallstones. Patients may have non-specific symptoms including weight loss, abdominal pain, fevers, night sweats and fatigue. Distal and perihilar cholangiocarcinomas or gallbladder cancers more frequently cause patients to develop jaundice due to tumor or lymph nodes blocking a major bile duct [4]. Most cases of biliary tract cancer are sporadic, with no identifiable predisposing patient factors. There are several known risk factors for development of cholangiocarcinoma however, including liver cirrhosis, hepatitis B and C, biliary tract stones, liver fluke infections, a congenital anatomical abnormality called a choledochal cyst and the chronic condition of inflamed bile ducts also called primary sclerosing cholangitis. Exposure to some industrial chemicals such as nitrosamines, dioxin, asbestos, and polychlorinated biphenyls are also thought to increase an individual's risk of developing cholangiocarcinoma. In the USA, gallbladder cancer is commonly associated with the presence of long standing gallstones resulting in calcification of the gallbladder wall or "porcelain gallbladder". Gallbladder polyps are also associated with increased risk of gallbladder cancer. The incidence of bile duct cancers differs worldwide, likely reflecting both differing genetic predisposition and variable exposure to known risk factors[5]. Approximately 12,000 new affected individuals of bile duct cancers are diagnosed in the USA each year, of which over 9,000 are gallbladder cancers and distal/perihilar cholangiocarcinomas and 3,000 are intrahepatic cholangiocarcinomas [6]. The overall incidence of perihilar cholangiocarcinoma in the United States is 1 person per 100,000 per year. The incidence of intrahepatic cholangiocarcinoma in the United States is approximately 0.7 per 100,000. During the last 30 years, it appears that the incidence of biliary tract cancers in the United States is increasing [7]. This increase may be due in part to increased recognition of the diagnosis of biliary cancer, cases which may previously have been classified as cancer of unknown origin. Gallbladder cancer is more common in women than in men, and in some countries the rates are three times higher for women. Certain geographic areas are characterized by a high incidence of gallbladder cancer, including Chile, Bolivia and India. A high incidence also has been documented in North American Native Americans and Mexican Americans [7]. A diagnosis of cholangiocarcinoma or gallbladder cancer is made based on identification of characteristic symptoms (if present), a detailed patient history, clinical examination and several specialized tests including blood test, imaging tests and endoscopic procedures. Either CT or MRI scans may be used to assess the tumor size and to look for blockage of the bile ducts and sites of spread [9, 10]. ERCP may be used to insert a stent into a blocked bile duct to relieve jaundice. A biopsy is usually required to confirm the pathologic diagnosis and may be obtained by a CT or endoscopic ultrasound (EUS) guided biopsy [11]. Some patients with gallbladder cancer are incidentally diagnosed following elective removal of their gallbladder due to gallstones, where the cancer is only detected on pathologic examination.