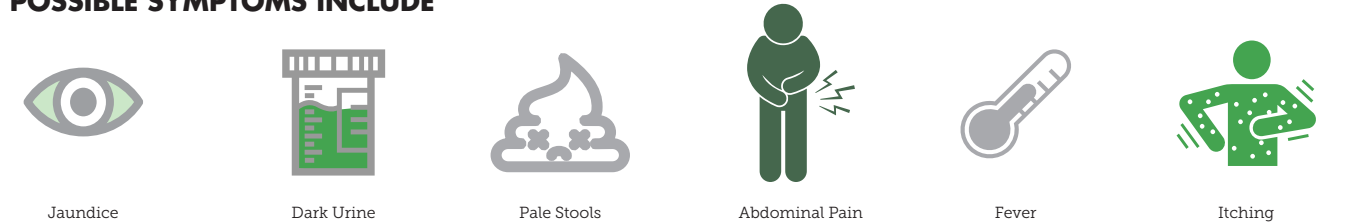


# CHOLANGIOCARCINOMA (BILE DUCT CANCER)

## POSSIBLE RISK FACTORS

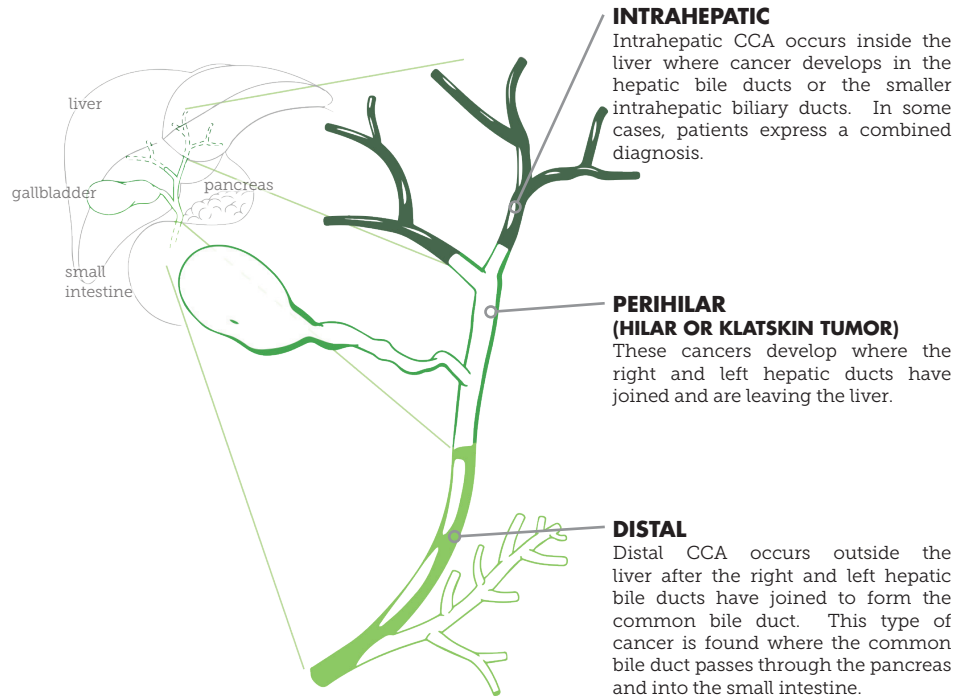


## POSSIBLE SYMPTOMS INCLUDE



### KNOWN MUTATIONS IN CHOLANGIOCARCINOMA

- |        |            |
|--------|------------|
| APC    | KRAS       |
| ARID1A | MCL1       |
| ATM    | MDM2       |
| BAP1   | MSI        |
| BRAF   | MYC        |
| BRCA2  | NRAS       |
| CCND1  | NTRK       |
| CDKN2A | PBRM1      |
| CDKN2B | PIK3CA     |
| ERBB2  | PTEN       |
| FGFR2  | SMAD4      |
| FRS2   | STK11      |
| IDH1   | TP53       |
| IDH2   | (and more) |



About 10,000 people in the United States are diagnosed with bile duct cancer each year. The actual number of cases may be higher as this cancer is hard to diagnose and sometimes misclassified as other types of cancers.



The highest rates of cholangiocarcinoma are in northeast Thailand and are about 100 times higher than in the West.

Higher prevalence in Asia is attributed to parasitic infestation.

