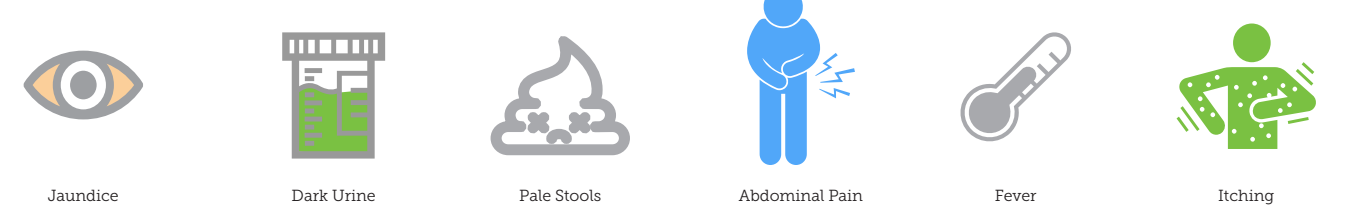


CHOLANGIOCARCINOMA (BILE DUCT CANCER)

POSSIBLE RISK FACTORS

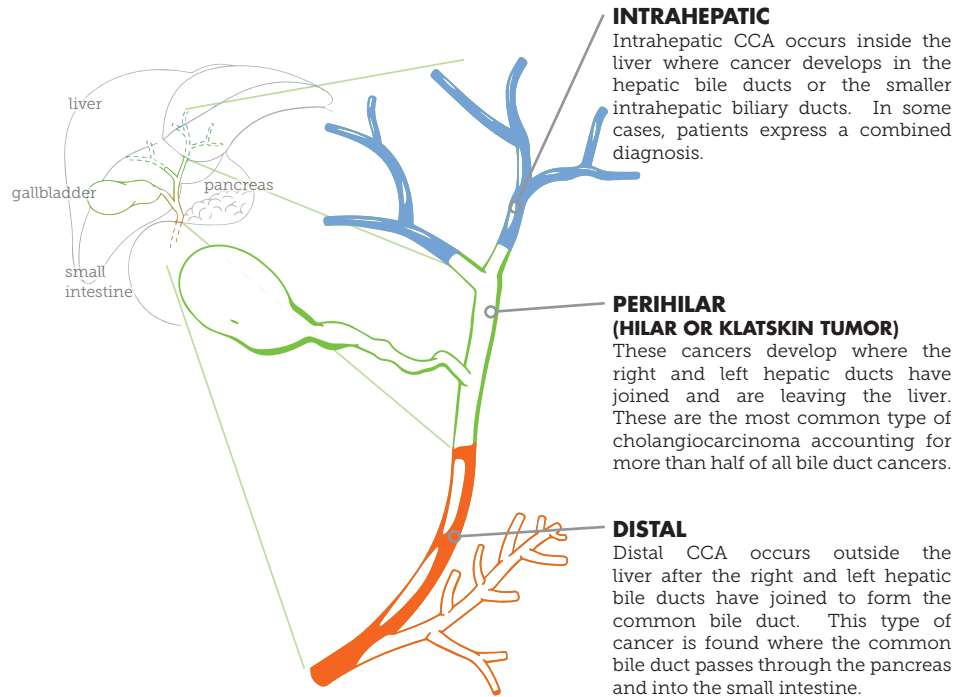


POSSIBLE SYMPTOMS INCLUDE



KNOWN MUTATIONS IN CHOLANGIOCARCINOMA

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



About 8,000 people in the United States develop bile duct cancer each year. But it is anticipated that the actual number of cases is higher as this cancer is hardly diagnosed and sometimes may be misclassified as other types of cancers.



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

Higher prevalence in Asia is attributed to endemic chronic parasitic infestation.

