

# **CHOLANGIOCARCINOMA; UPDATES IN DIAGNOSIS AND TREATMENT**

## **An Essay**

Submitted for partial fulfillment of the M.Sc.  
degree  
**in General Surgery**

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**2016**

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(...رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ  
نِعْمَتَكَ الَّتِي أَنْعَمْتَ عَلَيَّ  
وَعَلَى وَالِدَيَّ

وَأَنْ أَعْمَلَ صَالِحاً تَرْضَاهُ  
وَأَدْخِلْنِي بِرَحْمَتِكَ فِي  
عِبَادِكَ الصَّالِحِينَ)

صدق الله العظيم

النمل.. آية

رقم 19



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*I would like to dedicate this Essay to my  
Family; to them I will never find  
adequate words to express my gratitude.*

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# List of Abbreviations

<b>AJCC</b>	American Joint Committee on Cancer
<b>Anti-HBc</b>	Antibodies to Hepatitis B core antigen
<b>ASMR</b>	Age Standardized Mortality Rate
<b>CA</b>	Carbohydrate Antigen
<b>CCA</b>	Cholangiocarcinoma
<b>CHD</b>	Common Hepatic Duct
<b>Cis</b>	Carcinoma in situ
<b>CSCs</b>	Cancer Stem Cells
<b>CT</b>	Computed Tomography
<b>EAPC</b>	Estimated Annual Percentage Changed
<b>EASL</b>	European Association for Study of Liver
<b>ECC</b>	Extrahepatic Cholangiocarcinoma
<b>EGF</b>	Epidermal Growth Factor
<b>EGFR</b>	Epidermal Growth Factor Receptor
<b>EHBT</b>	Extra Hepatic Biliary Tumor



<b>EMT</b>	Transformation of Epithelial and Mesenchymal
<b>ERCP</b>	Endoscopic Retrograde Cholangiopancreatogram
<b>EX-CCA</b>	Extrahepatic Cholangiocarcinoma
<b>F</b>	Female
<b>FDG</b>	Fludeoxyglucose
<b>FDG-PET</b>	Fludeoxyglucose-Positron Emission Tomography
<b>FLR</b>	Future Liver Remnant
<b>GB</b>	Gall Bladder
<b>HAI</b>	Hepatic Arterial Infusion
<b>HBV</b>	Hepatitis B Virus
<b>HBsAg</b>	Hepatitis B Surface Antigen
<b>HCC</b>	Hepatocellular Carcinoma
<b>HC-CCA</b>	Hepatocellular Cholangiocarcinoma
<b>HCV</b>	Hepatitis C Virus
<b>HIV</b>	Human Immunodeficiency Virus
<b>IARC</b>	International Agency for Research on Cancer

<b>ICC</b>	Intrahepatic Cholangiocarcinoma
<b>ICD-O</b>	International Classification of Disease for Oncology
<b>IDUS</b>	Intraductal Ultra Sonography
<b>IHBT</b>	Intra Hepatic Biliary Tumor
<b>IH-CCA</b>	Intrahepatic Cholangiocarcinoma
<b>IPMN</b>	Pancreatic Intraductal Papillary Mucinous Neoplasm
<b>IPNB</b>	Biliary Intraductal Papillary Mucinous Neoplasm
<b>IVC</b>	Inferior Vena Cava
<b>LCSGT</b>	Liver Cancer Study Group of Japan
<b>M</b>	Male
<b>MDCT</b>	Multi-Detector Computed Tomography
<b>MER</b>	Mitogen-activated ERK Kinase
<b>MRCP</b>	Magnetic Resonance Cholangiopancreatogram
<b>MRI</b>	Magnetic Resonance Imaging
<b>PCC</b>	Perihilar Cholangiocarcinoma
<b>PDGF</b>	Platelet Derived Growth Factor
<b>PDT</b>	Photodynamic Therapy

<b>PERCIST</b>	PET Response Criteria In Solid Tumor
<b>PSC</b>	Primary Sclerosing Cholangitis
<b>PTC</b>	Percutaneous Trans-Hepatic Cholangiopancreatogram
<b>PVE</b>	Portal Vein Embolization
<b>R0 Resection</b>	Surgical Resection with histological negative margins
<b>RECIST</b>	Response Evaluation Criteria In Solid Tumor
<b>RFA</b>	Radiofrequency Ablation
<b>RT</b>	Radiotherapy
<b>SBRT</b>	Stereotactic Body Radiotherapy
<b>SEER</b>	Surveillance, Epidemiology and End Result
<b>TACE</b>	Trans Arterial Chemo Embolization
<b>TARE</b>	Trans Arterial Radio Embolization
<b>TGF</b>	Tumor Growth Factor
<b>TME</b>	Tumor Micro Environment
<b>US</b>	Ultra Sonography
<b>WHO</b>	World Health Organization
<b>5-FU</b>	5- Fluorouracil

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