Pre operative chemotherapy experience in Srinagarind hospital Khon Kaen University Thailand, neoadjuvant chemotherapy and conversion surgery

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Introduction

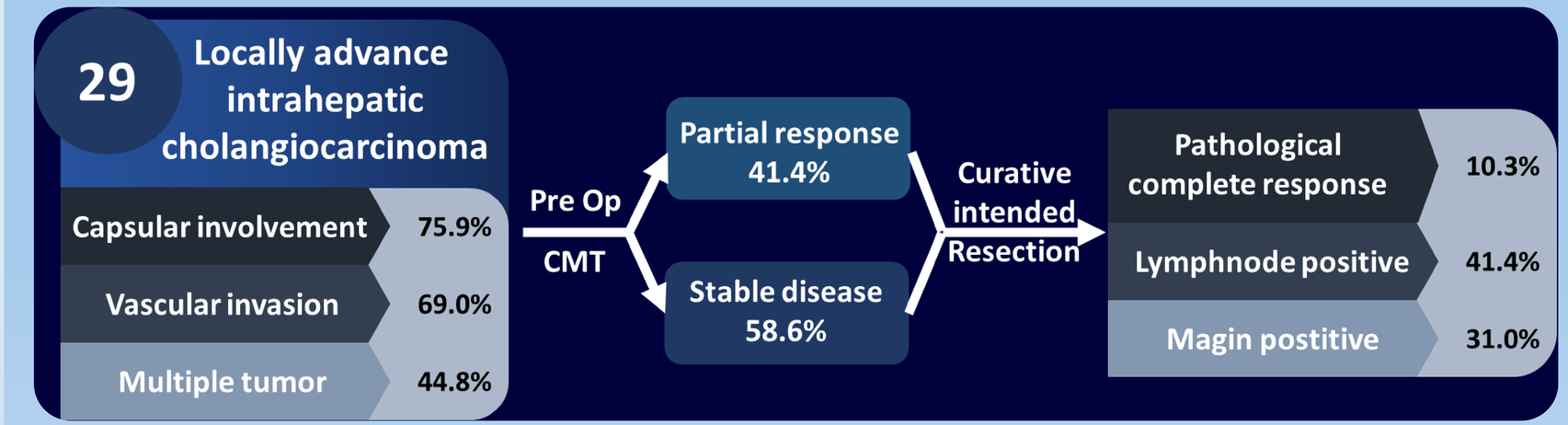
Resectability assessment for cholangiocarcinoma remains controversial worldwide, and the role of preoperative chemotherapy in borderline resectable disease, including its use as conversion therapy, has not been well established. We present a case series of patients with cholangiocarcinoma who underwent chemotherapy followed by curative-intent surgical resection.

Method

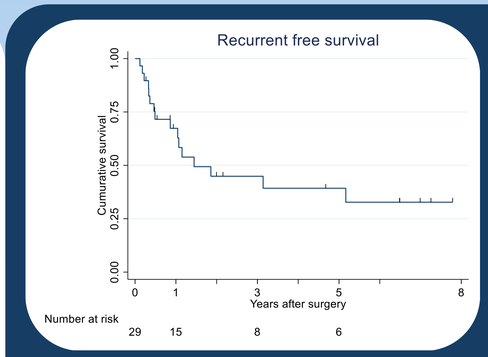
A retrospective analysis included patients who received preoperative chemotherapy followed by surgery between 2017 and 2025. Treatment response, tumor characteristics and morphology, margin status, pathological staging, and survival outcomes were analyzed.

Result

A total of 29 patients were included, with a median age of 61 years (range, 36–74), of whom 15 (51.7%) were male. Tumors involving the hilar region requiring resection were observed in 8 (27.6%). Oxaliplatin-based regimens were most commonly used in 21 (72.4%). The mean tumor size was 8.4 ± 4.1 cm, with capsular retraction in 22 (75.9%), vascular invasion in 20 (69.0%), and multiplicity in 13 (44.8%). Following chemotherapy, partial response was observed in 12 (41.4%) and stable disease in 17 (58.6%), with a reduction in tumor size to 6.2 ± 4.2 cm. Lymph node metastasis was present in 12 (41.4%), and margin-positive resection occurred in 9 (31.0%). A pathological complete response was achieved in 3 (10.3%). The median recurrence-free survival was 17.6 months, while the median overall survival was 28.7 months, with a 5-year survival rate of 47.7%.

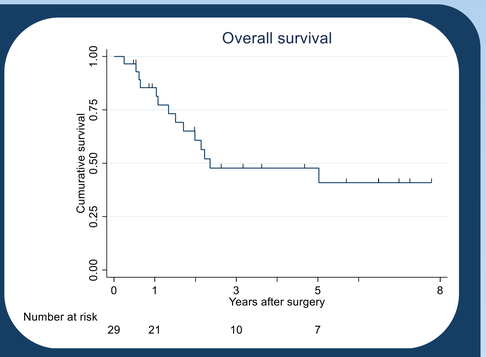


Characteristic	
Age (median, range)	61 (36 to 74)
Gender	
Male	15 (51.7%)
Female	14 (48.3%)
Location	
Intrahepatic	21 (72.4%)
Intrahepatic involve hilar	8 (27.6%)
Pre operative chemotherapy used	
Oxaliplatin based	21 (72.4%)
Gemcitabine based	3 (10.3%)
5FU based	5 (17.2%)
Tumor Characteristic	
Tumor size (mean, SD)	8.4 (4.1)
Capsular retraction	22 (75.9%)
Vascular invasion	20 (69.0%)
Multiplicity	13 (44.8%)
Tumor morphology	
Mass forming	27 (93.1%)
Periductal infiltrating	13 (44.8%)
Intraductal growth	3 (10.4%)
Response	
Partial response	12 (41.4%)
Stable disease	17 (58.6%)
Post chemotherapy size	6.2 (4.2)
Pathological	
T1	1 (3.5%)
T2	6 (20.7%)
T3	22 (75.9%)
Lymph node metastasis	12 (41.4%)
Margin positive	9 (31.0%)
Pathological complete response	3 (10.3%)
Post operative chemotherapy received	22 (75.9%)



Median recurrent time 17.6 mo

5 years recurrent rate 39.3%



Median survival time 28.7 mo

5 years survival rate 47.7%

Discussion

Studies on neoadjuvant chemotherapy have been conducted in small patient populations, with variable results. Several randomized studies are currently ongoing[1]. This study demonstrates the efficacy of neoadjuvant chemotherapy, with 10% of patients achieving a complete pathological response; however, only half achieved 5-year survival.In conclusion, preoperative chemotherapy demonstrated tumor response in selected patients; further studies are needed to define resectability criteria and clarify its benefits across different resectability groups.

Reference

1. Rizzo A, Brandi G. Neoadjuvant therapy for cholangiocarcinoma: A comprehensive literature review. Cancer Treat Res Commun. 2021;27:100354. doi: 10.1016/j.ctarc.2021.100354. Epub 2021 Mar 16. PMID: 33756174.