Risk factors and therapeutic outcomes of acute acalculous cholecystitis

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Background and aims: Acute acalculous cholecystitis (AAC) is traditionally known to occur in critically ill patients and to have a worse prognosis compared to acute calculous cholecystitis (ACC). Although cholecystectomy is usually recommended for the treatment of AAC, non-surgical treatment may be a good alternative treatment especially in high risk patients. The objective of this study was to review the incidence, risk factors, treatment modality and therapeutic outcome of AAC.

Methods: The data of 69 AAC patients and 415 ACC patients between January 2007 and August 2011 were collected from hospital records. The diagnostic criteria for acute cholecystitis were right upper quadrant abdominal pain or tenderness with characteristic image findings compatible to acute cholecystitis. AAC was defined when there were no stones or sludge in the biliary tree on imaging study. The demographic characteristics, clinicopathologic features, and therapeutic modality and outcomes were analyzed and compared between AAC and ACC patients.

Results: Sixty-nine cases of the total 484 patients with acute cholecystitis fulfilled the criteria for the diagnosis of AAC. Age was not significantly different between AAC and ACC group (67 vs. 63 years). There was male predominance in the AAC group compared to ACC group. Cerebrovascular accidents were significantly more frequent in patients with AAC than those with ACC (15.9% vs. 6.7%, p<0.05, OR=2.621, 95% CI, 1.238-5.550). There was higher incidence of gangrenous cholecystitis in AAC group than ACC group (31.2% vs. 5.6%, p=0.000, OR=7.647, 95% CI, 3.130-18.685). Of the 69 AAC patients, 32 patients (46.4%) underwent cholecystectomy, 12 patients (17.4%) were treated with percutaneous cholecystostomy, and 25 patients (36.2%) received antibiotics only. The overall therapeutic outcomes of AAC were not statistically different from patients with ACC.

Conclusions: The risk of AAC increases in patients with advanced age and cerebrovascular accidents. Cholecystectomy is recommended because of higher incidence of gangrenous cholecystitis in AAC patients. However, non-surgical treatment such as percutaneous cholecystostomy or antibiotics only might be effective especially in high risk patients.

Comparison of Efficacy Between Full-dose GEM CCRT and 5FU CCRT in Locally Advanced Pancreatic Cancer

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Background: Concurrent chemoradiotherapy (CCRT) is a standard therapeutic option for managing locally advanced pancreatic cancer (LAPC). Although 5-Fluorouracil (5-FU) or gemcitabine are recommended as the reference chemotherapeutic agent for CCRT, the optimal dosage for CCRT is still controversial. Aim: To compare the therapeutic efficacy and tolerability of full-dose gemcitabine based CCRT (FG-CCRT) and low dose 5-FU based CCRT (5FU-CCRT) for LAPC.

Methods & Materials: From January 2006 to March 2013, 110 patients with LAPC who received FG-CCRT (n=90) or 5FU-CCRT (n=20) were included for retrospective analysis. FG-CCRT included full-dose weekly gemcitabine monotherapy (1000 mg/m2) or combination therapy with cisplatin (70 mg/m2). 5FU-CCRT treated with radiosensitizing low dose of bolus 5-FU (500mg/m2, weekly) plus leucovorin (20mg/m2). Concurrent radiotherapy targeted the primary tumor with 5 to 10 mm margin without regional lymph node irradiation. One month after completion of CCRT, response evaluation was conducted by computed tomography scan.

Results: FG-CCRT had more advanced T-stage at the time of diagnosis (T4-86.7% versus 60.0%; p=0.005). Objective response rate (ORR) and disease control rate (DCR) was significantly higher for FG-CCRT than 5FU-CCRT (ORR=32.6% versus 5%; p=0.013; DCR=79.8% versus 50.0%; p=0.006). Both groups showed similar loco-regional control rate (92.2% versus 85.0%; p=0.362) but distant metastasis rate was higher in 5FU-CCRT (17.8% versus 45.0%; p=0.017). Grade 3 or higher neutropenia (34.4% versus 10%; p=0.031) and thrombocytopenia (21.1% versus 0%; p=0.021) was more frequent in FG-CCRT. The subgroup of FG-CCRT patients who received gemcitabine monotherapy showed no significant differences in toxicity rate compared with 5FU-CCRT (all p>0.05).

Conclusion: Full-dose gemcitabine based CCRT seems more effective on initial local and distant control of LAPC than bolus 5-FU based CCRT. With cautious monitoring on hematologic toxicities, FG-CCRT can be tolerably conducted. Considering that distant metastasis is one of treatment failure pattern in CCRT of LAPC, full-dose gemcitabine CCRT should be considered as the first line treatment.