Percutaneous cholecystostomy in the management of acute cholecystitis

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Aim: The aim of this study is to clarify the role of percutaneous cholecystostomy in calculous acute cholecystitis treatment and to elucidate about its association with the surgical treatment.

Introduction: Laparoscopic cholecystectomy is the gold-standard treatment in acute cholecystitis. However, percutaneous cholecystostomy stands as an alternative therapeutic approach among the elderly or patients with several comorbidities.

Methods: In December 2016, a systematic database search on PubMed, Scopus and Web of Science was conducted to identify articles on percutaneous cholecystostomy published from January 2013 to November 2016, using the query “acute cholecystitis OR severe cholecystitis” AND (cholecystostomy OR percutaneous cholecystostomy OR cholecystostomy tube). In total, 290 articles were found and submitted to inclusion and exclusion criteria.

Results: A total of 13 records involving 1130 patients from 10 different countries met all inclusion criteria and were therefore included in this systematic review. All studies found eligible concluded percutaneous cholecystostomy is a potentially safe and effective therapeutic approach among high-risk surgical patients in the setting of acute cholecystitis. Percentage of patients undergoing percutaneous cholecystostomy followed by cholecystectomy varied between 7.2% and a maximum of 66.7%, with a conversion rate fluctuating between 0.0% and 66.7%. Complication and mortality rates ranged from 2.2% to 41.7% and 0.0% to 43.2%, respectively.

Conclusion: Percutaneous cholecystostomy is generally considered safe and effective among high-risk surgical patients diagnosed with acute cholecystitis.

References: