

ALPPS for perihilar cholangiocarcinoma

analysis of outcomes according to a developed risk score and comparison with standard resection

Thomas van Gulik, Karl Oldhafer, Pim Olthof

Background:

R0 liver resection offers the only chance of long-term survival for patients with perihilar cholangiocarcinoma (PHC). Extended liver resection for PHC is however, associated with substantial morbidity and mortality of up to 17%. When the FLR share was below 30% , mortality after resection was even reported up to 26-33%. In the first reports on ALPPS for PHC, morbidity and mortality were high, even substantially higher than previous series entailing standard resections. Considering that ALPPS patients usually have small future liver remnant, outcomes of ALPPS might not be worse when stratified according to a developed risk score, or when compared to appropriate controls.

Objectives:

The objective of the project will be to analyze the morbidity and mortality of ALPPS for PHC and place the outcomes in appropriate context according to appropriate controls and a risk score (currently submitted) that was recently developed to predict postoperative mortality following major resection for PHC.

Methods:

All patients included in the ALPPS registry with the diagnosis PHC will be analyzed. Outcomes will be identified and stratified according to the criteria included in the risk score such as age, preoperative cholangitis, future remnant liver share and portal vein reconstruction. Adverse outcomes will be analyzed in detail to improve future treatment. When sufficient data is available, ALPPS patients will be compared to appropriate controls who received standard extended hepatectomy for PHC. Impact of the findings: At the ALPPS expert conference in Hamburg in 2015, PHC was considered as contra-indication for ALPPS until more experience with ALPPS would become available. However, ALPPS could have potential in increasing resectability of PHC, especially when considering the reduced regenerative capacity induced by cholestasis. Therefore critical analysis of outcomes should be performed, as these are most likely very high-risk patients and outcomes should be placed in context of appropriate high-risk controls.