Body: The hepatic artery thrombosis (HAT) is reported in 4 to 15% of orthotopic liver transplants and is more frequent in pediatric transplantation. Risk factors include technical error in the anastomosis, vascular anatomical variation, arterial complex reconstruction in the graft during the backtable and high microvascular resistance caused both by rejection and ischemia-reperfusion injury. The incidence of HAT was 7.6%. There was vascular anatomical variation in the graft in 16.6% of cases, all of them a right hepatic artery from the superior mesenteric artery. 27.7% of patients received polytransfusion. 11.1% of patients had acute cellular rejection. The average cold ischemia time was 7 hours and 54 minutes and warm ischemia was 47 minutes. The mortality of patients with HAT was 55.5%. Hepatic artery thrombosis is a serious complication of liver transplantation because it is related to acute graft loss and significant increase in morbidity and mortality. The knowledge of its risk factors, improvement of surgical technique, early diagnosis and the access to less invasive approaches such as endovascular might avoid the need for retransplantation and significantly reduce the morbidity and mortality.