In our work we wanted to confirm our clinical experience with therapy of biliary and pancreatic duct injuries from the endoscopic retrograde cholangiopancreatography (ERCP) which was done in 267 children and infants with a variety of biliary tract disorders and traumatic injuries in the area of biliary and pancreatic duct. Pressure of the bile plays the key role in the therapy of biliary tract injuries. Therefore we have measured the pressure in biliary tract and duodenum before and after the sphincterotomy of Oddi sphincter. The aim of our study was to confirm the insertion of drainage into the biliary and pancreatic duct in children with injury in this area. Our results showed significant differences between biliary duct pressure and duodenal pressure in the patients before and after sphincterotomy of Oddi sphincter. This results on theoretical basis confirmed, that it is necessary in children after traumatic rupture of biliary duct to provide ERCP and insert a biliary drainage after sphincterotomy. With this procedure the biliary tract injury is healed ad integrum without surgical liver resection. To provide only papillosphincterotomy without biliary drainage is not sufficient. This new miniinvasive procedure plays a fundamental role in the therapy of blunt abdominal injuries in a children and infants. The new method decreased the number of surgical resections in the area of liver and pancreas.