Laser Lithotripsy to Treat Basket Impaction during Mechanical Lithotripsy of a Pancreatic Duct Stone

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ABSTRACT

Context Though uncommon, pancreatic duct stones can cause significant discomfort and morbidity. Endoscopic removal of pancreatic stones may decrease intraductal pressure by augmenting ductal drainage. Endoscopy is shown to be most effective when used early in the course of the disease. Endoscopic methods such as mechanical lithotripsy are often successful in removing the majority of pancreatic stones. However, its complication rate is quite high, with basket malfunction being the one most frequently encountered. Case report We report a case of a patient with idiopathic chronic calcific pancreatitis presenting with symptomatic pancreatic duct stones. During one attempt of basket mechanical lithotripsy, the basket wires fractured. The basket and stone thus became entrapped in the patient’s pancreatic duct. Holmium laser lithotripsy was applied via the mother-baby system of the endoscope. The stone was crushed, and the basket and stone fragments were able to be removed. Conclusions To our knowledge, this is the first time laser lithotripsy has been employed to relieve basket impaction during attempted mechanical lithotripsy of a pancreatic duct stone. This method may be considered as a rescue technique by endoscopists encountering basket impaction in the future.