

P404**Percutaneous Management of Benign Biliary Enteric Anastomotic Strictures after Iatrogenic Bile Duct Injuries**

Mustafa Belal Hafeez Chaudhry,
Nauman Alqamari¹, Raza Sayani,
Rana Shoaib Hamid², Rana Shoaib Hamid

*The Aga Khan University, ¹Dow Institute of Radiology, Karachi, Pakistan, ²Sultan Qaboos University Hospital, Muscat, Oman.
 E-mail: belal.ibnehafeez@gmail.com*

Background: To assess the technical success, complications and reintervention rate of percutaneous transhepatic balloon dilatation (PTBD) of biliary enteric anastomotic strictures (BES). **Methods:** A retrospective review of patients who underwent PTBD for benign resistant BES, were previously treated for iatrogenic bile duct injuries, from December 2004 to January 2016 was performed. Diagnostic transhepatic cholangiogram was performed to assess level of obstruction. Strictures were dilated using 8-12 mm diameter balloons followed by placement of 8-10 Fr internal-external drainage catheters, which're removed after 3-5 days post-PTBD cholangiogram. Follow up by clinical assessment, liver function tests and ultrasound was done. Fischer exact test was used to determine if there was a significant association between PTBD sessions and recurrent strictures. **Results:** In total, 37 patients underwent PTBD including 10 (27%) males and 27 (73%) females. Mean age was 41.3 yrs. (range 23-70 yrs.). Out of these, 29 (78.4%) were treated with choledochojunostomy and 8 (21.6%) with hepaticojunostomy. 100% success was achieved in all the PTBD sessions. 19 (51.3%) patients were treated with a single PTBD session. Mean follow-up time was 36 months (Range 1-75 months). 2 (5.4%) patients were lost to follow up after first session of PTBD. 18 (48.7%) patients needed reintervention, out of these, 11 (29.7%) were symptom free after second session on 3 year follow up, 3 (8.1%) were symptom free after the third session of PTBD. No significant difference in risk of recurrent strictures after 1st and 2nd PTBD sessions [18 (48.7%) vs. 7 (39%); $P < 0.5716$]. In 4 (10.9%) patients, the symptoms persisted and the stricture recurred even after third session and were treated by placing metallic stent. In total, 3 (8.1%) patients got complicated with the stone formation; in 2 (5.4%) patients it was successfully removed percutaneously and in 1 (2.7%) percutaneous attempt failed followed by surgical removal. **Conclusions:** PTBD is a safe and useful treatment option for BES for long-term symptoms free time-period. However, there is no significant difference in developing recurrent BES after PTBD sessions. Few patients with resistant strictures might require stent placement.

P405**Articular Cartilage Protection with Temperature Monitoring During Percutaneous Tumor Thermal Ablation: Novel Technique**

Salem Bauones^{1,2}, Julien Garnon²,
Georgia Tsoumakidou², Roberto L Cazzato²,
Afshin Gangi²

¹King Fahd Medical City, Riyadh, Saudi Arabia, ²University Hospitals of Strasbourg, Strasbourg, France. E-mail: sa.bauones@gmail.com

Background: Objective: To review our initial experience in acetabular cartilage protection from thermal injury with temperature monitoring during percutaneous image-guided tumor thermal ablation. **Methods:** Between June 2015 and May 2016, three consecutive oncologic patients (mean age 58 years; range 48-67 years) with acetabular bone metastasis underwent percutaneous image-guided thermal ablation procedures along with hip joint cartilage thermal monitoring. Owing to the close proximity of the metastatic lesion to the acetabular articular cartilage, a thermocouple was placed under CT and fluoroscopic guidance, immediately near to the acetabular roof and next to the ablation zone in order to measure the reached local temperature near to the cartilage. Stand-alone thermal ablation (n = 1) and Combined thermal ablation with cementoplasty (n = 2) had been performed to optimize local palliation or disease control. Follow-up was undertaken every few weeks. Clinical and radiological outcomes at follow-up were assessed. **Results:** Three acetabular metastases were treated with thermal ablation and temperature monitoring of the acetabular articular cartilage during the ablation procedure. Mean size of lesions was 1.6 cm (range 1.5-2 cm). Technical success was achieved in all cases (100%), without complications. No hip cartilage damage on MRI. Good palliation and local disease control in two cases. One case showed local recurrence and distant progression of his metastatic disease after 27 weeks of follow-up. **Conclusions:** Temperature monitoring of the articular cartilage during percutaneous image-guided thermal ablation appears technically feasible with good short-term efficacy in this complex patient subset. Further studies are warranted to confirm these promising initial results.

P406**The Efficiency of Transhepatic Biliary Decompression in Patients with Failed Endoscopic Therapy**

Elie Lteif, Abbas Chamsuddin, Raja Ashou

University of Balamand, Saint George University Medical Center, Beirut, Lebanon. E-mail: achamsuddin@beirutclis.com

Background: To evaluate the efficiency, indications, outcome, complications and safety of Percutaneous Transhepatic Biliary Decompression (PTBD) in patients with benign and malignant biliary obstruction and failed endoscopic therapy. We report a single-center experience of percutaneous biliary drainage in patients with biliary obstruction salvaged with PTBD at St. Georges Hospital University Medical Center (SGHUMC). **Methods:** This study was approved by our institutional review board. Over a period of 18 months (January 2015-June 2016), Endoscopic Retrograde Cholangiopancreatography (ERCP) was performed on 44 patients with biliary obstruction. Of these, 39 patients had malignant obstruction, and 4 patients had benign stone-related obstruction. Failure to properly intubate the ampulla and decompress the biliary tree through the retrograde endoscopic approach by experienced gastroenterologists occurred in 14 patients. These 14 patients were then referred for PTBD. Insertion of biliary drains was performed under fluoroscopic, ultrasound or CT scan guidance by interventional radiologists using Acustik sets and biliary drainage catheters ranging from 10-22 French calibers. **Results:** Drainage and decompression of the biliary system was successful in all 14 patients. 12 patients had