OC2.7

Ultrasound Guided Management of Ectopic Pregnancy: Two Cases Presentation Medina, Saudi Arabia

Azza Usama Yosuph, Mazen Saud Alraddadi¹, Gamal Mohamed Elawally, Nisreen Fuad Khoja

Maternity and Children Hospital, ¹King Fahd Hospital, Medina, Saudi Arabia.

E-mail: azza.yosuph@gmail.com

Background: Cervical and cesarean section (CS) scar ectopic pregnancies are rare forms of ectopic pregnancies. They are one of the leading causes of maternal morbidity and mortality. Early detection and diagnosis of these entities are important for an early intervention to reduce its life-threatening complications. Medical or surgical management are depending mainly on fertility or life-saving conditions. **Method(s):** Two ladies were presented to the hospital with vaginal bleeding and cramping abdominal pain. Lab investigation and medical imaging confirm the diagnosis of 1st-trimester cervical and CS scar ectopic pregnancies for the first and second case respectively. **Result(s):** Both patients underwent an unsuccessful trial of systemic methotrexate therapy, followed by successful ultrasound-guided intra-amniotic injection of methotrexate, under standard precautions in the operative room with no immediate complications. Post-treatment period shows a progressive decline in the beta-HCG and evidence of gestational sac resolution in the follow-up imaging. **Conclusion(s):** As a minimally invasive procedure, ultrasound-guided intra-amniotic injection of methotrexate was our second line in managing and treating the ectopic pregnancy cases, it was safe and effective. Further evaluation with a larger sample is required to ensure its safety and efficiency.

OC2.8

Angioembolization and Radiofrequency Ablation Assisted Vertebroplasty for Lytic Metastatic Tumour of Spine

Manish Rajput, Rakasi Naveen

TATA Memorial Hospital, Mumbai, Maharashtra, India.

E-mail: doctormanish84@gmail.com

Background: To determine the safety and efficacy of angioembolization and RFA assisted vertebroplasty (VP) on the basis of clinical outcome in pathological / insufficiency fracture of vertebra. The insufficiency fracture because of lytic metastasis secondary to primary malignancy, which is commonest malignancy of skeletal system. **Method(s):** Patient referred to ir department from 2008 to 2018 for malignant / pathological vertebral body fracture were assessed and distributed in two groups: (1) Multiple myeloma group. (2) Non myeloma group. For these two groups vertebroplasty assessment done and the other possibilities ruled out. Cocktail therapy was planned and given to only non myeloma group. Clinical effectiveness was assessed by cect spine and electronic medical record pre and post procedure. Pain score (VAS) were also documented pre and post procedure. **Result(s):** 31 patients were included in the study, which make 40 vp level. 6 patients were done angioembolization and rfa assisted vertebroplasty. 16 patients were done only rfa

assisted vertebroplasty. 9 patients were done only vertebroplasty. All the cases were successfully treated without any morbidity and mortality. Pain score (VAS) reduced and increase in quality of life. **Conclusion(s):** Angioembolization and rfa assisted vertebroplasty is a safe and effective treatment option for metastatic lesion with soft tissue mass. Angioembolization decreases vascularity of soft mass and thermal cavity (RFA) allows controlled cement injection without posterior or disc leak.

OC2.9

Combined Antegrade and Retrograde Approach in Iatrogenic Ureteral Injuries: The Rendezvous Technique

Pacella Giuseppina, Faiella Eliodoro, Santucci Domiziana, Grasso Rosario Francesco, Beomonte Zobel Bruno

Campus Bio-medico University, Rome, Italy.

E-mail: g.pacella@unicampus.it

Background: To evaluate feasibility and effectiveness of the rendezvous technique in case of complete iatrogenic ureteral injuries. **Method(s):** From 2012 to 2017, 21 patients were treated with the rendezvous technique for mono- or bilateral complete iatrogenic ureteral injuries. All the leak derived from the ureteral injury were previously assessed by CT-urography and antegrade pielography. The rendezvous technique was performed after a period from the main surgical intervention ranged from 8 to 67 days, by 2 interventional radiologists and urologic/gynecologic team, in order to re-establish the ureteral continuity. A nephrostomy was positioned for each side of the lesion and the procedure was completed with an antegrade and retrograde access. A double j stent was antegradely inserted and a nephrostomy tube was kept in place. No major complications were observed. A post-procedure CT-urography and a 30 days follow-up with contrast antegrade nephrostomography were performed. In absence of contrast leak, the nephrostomy tube was removed. At the time of stent removal the CT-urography was performed to confirm the restored integrity of the ureter. **Result(s):** The rendezvous technique was successful in all cases with resolution of the ureteral leak. All patients removed the nephrostomy tube after 30 days. After performing CT-urography the stent was removed permanently after 12 months. Three cases showed local post-treatment stenosis. **Conclusion(s):** The rendezvous technique is a safe and effective minimally invasive procedure that can be used to restore the continuity of the ureter avoiding open surgical.

OC2.10

Computed Tomography Guided Pulmonary Nodule Microcoil Localization

Sultan R. Alharbi

King Saud University, Riyadh, Saudi Arabia.

E-mail: drsultan000@gmail.com

Background: To evaluate the safety and effectiveness of CT guided micro coil localization of pulmonary nodule prior to video assisted thoracoscopy surgery (VATS). **Method(s):** From August 2015 to August 2018, 30 consecutive patients (17 men and 13 women; mean age, 56 years) underwent CT-guided micro coil

localization of 42 pulmonary nodules (mean size, 7.3 mm; range, 4-18 mm). A 7 cm platinum micro coil was inserted into pulmonary nodules under CT guidance using a 21-gauge chiba needle. The technical details, surgical and pathologic findings associated with micro coil localizations were retrospectively evaluated. **Result(s):** All nodules were localized by CT guided micro coil with 100% technical success with mean time 13.4 minutes (range 8- 26 minutes). 6 patients developed Mild parenchyma lung hemorrhage along with needle tract and 7 patient developed mild pneumothorax all are asymptomatic and no intervention needed. 3 patients developed moderate pneumothorax for which needle aspiration was performed but not chest tube was inserted. No other complication occurred. All micro coils were identified during the surgery except one which was dislodged and attached to chest wall (41 out of 42 micro coils) 97.6 % clinical success and all nodule were surgically resected. Pathology revealed 28 metastatic pulmonary nodules, 1 primary adenocarcinoma-in-situ and 13 benign pulmonary nodules. Micro coils did not affect the histopathology examination. **Conclusion(s):** CT-guided micro coil localization is an effective and safe pre-operative localization procedure prior to VATS, enabling accurate resection and diagnosis of pulmonary nodules.

OC2.11

Re-Establishing Patency of Occluded Metallic Biliary Stents by Endobiliary-Radiofrequency Ablation Technique

Shorav Bhatnagar, Alka Goyal¹

*QRG Central Hospital, ¹AIIMS, New Delhi, India.
E-mail: drshorav@yahoo.com*

Background: Biliary drainage with the use of metallic biliary stents (MBS) is a well-accepted palliative therapy for patients with unresectable malignant hilar obstruction. These stents often lose their patency over a period of 6-9 months secondary to tumor ingrowth or overgrowth, epithelial hyperplasia. Occlusion caused by sludge deposition or clot or stone formation. Limited treatment options are available for such a condition. Endobiliary radiofrequency ablation (RFA) has been shown to be an effective modality in the treatment of malignant biliary obstruction Here we present our experience with endobiliary RFA technique for restoring the patency of occluded MBS. **Method(s):** Patients were taken with previously placed MBS for malignant aetiology, presented with rising serum bilirubin and signs of cholangitis secondary to occlusion of MBS. Percutaneous trans-hepatic biliary drainage was achieved in all cases. After negotiating guide-wire across the stent, biliary drainage was established. After treating cholangitis, endobiliary-RFA was performed. Post-procedure cholangiogram was performed to ascertain the patency. Periodic clinical follow-up was scheduled for 6-months or till their survival. **Result(s):** The patients were followed up clinically and with USG to a minimum of 6 months or till their survival. The presence of pneumobilia on USG along with normal LFT were considered as the signs of stent patency. All patients showed restoration of patency on cholangiography examination performed on the following day of RFA (restored diameter 6-8 mm). The mean duration of stent patency after the first session of RFA was 3.9 months (range 2-7 months) which was comparable to the primary patency of these stents (4.8 months). This extended period of stent patency ensured administration of additional cycles of chemotherapy in these patients coupled with objective

improvement in the quality of life. **Conclusion(s):** Our experience suggests that endobiliary-RFA with balloon-sweep maneuver can be a safe and useful technique for re-establishing the patency of occluded MBS. Reopened stent with good short term patency offers medical oncologist a chance of administering additional chemotherapy which may improve patient's survival.

OC3.1

Road to Interventional Radiology: Introducing Interventional Radiology to the Global Community

Fabian Laage Gaupp, Ivan Rukundo¹, Azza Naif¹, Erick Mbuguje¹, David Prologo², Andrew Kesselman³, Douglas Silin, Frank Minja

*Yale University, New Haven, ²Emory University, Atlanta, ³Cornell University, New York, USA, ¹Muhimbili National Hospital, Dar es Salaam, Tanzania.
E-mail: fabian.laage-gaupp@yale.edu*

Background: According to the WHO four billion people around the world lack access to medical imaging, and even more lack access to Interventional Radiology (IR). We performed an assessment of the largest tertiary referral center and teaching hospital in Tanzania, a nation of over 50 million people. This demonstrated that there is currently not a single interventional radiologist in the entire nation, but all relevant imaging modalities, including Ultrasound, CT, and fluoroscopy, are available. **Method(s):** To address the acute shortage of IR in Tanzania, we started training Tanzanian Radiology residents in IR. Over the course of three years (2018-2021), 30 IR teams, each consisting of an IR faculty member, a nurse, and a technologist, travel to Tanzania in two-week blocks with the goal of training three Tanzanian residents per year to be fully competent in general IR and basic neurointerventional procedures. **Result(s):** During the initial two trips in October and November 2018, a total of 37 interventions were performed on 31 patients. Technical success was achieved in 30/31 initial procedures (97%). There were no major complications. Specifically, the following procedures were performed: 15 Core needle biopsies, 6 nephrostomy tube placements, 6 drain checks/internationalizations/exchanges, 4 biliary drain placements, 3 abscess drain placements, 2 cyst aspirations, and a cholecystostomy placement. All procedures were logged via Google forms and follow-up phone calls are performed at one and three months post-procedure. Preliminary follow-up data demonstrates that >90% of patients report no subsequent complications and are satisfied with the procedure and related care. **Conclusion(s):** This early experience demonstrates that IR practices can be established in the resource limited setting. There is potential for expansion of this program to other sites where IR can add great value, in many cases decreasing morbidity and improving patient satisfaction.

OC3.2

Percutaneous Obliteration of Urinary Leakage after Partial Nephrectomy Using Coils and N-butyl-cyanoacrylate

Ji Hoon Shin, Yasir M. Nouri¹, Hee Ho Chu

*Asan Medical Center, Seoul, South Korea, ¹King Fahad Hospital, Jeddah, Saudi Arabia.
E-mail: jhshin@amc.seoul.kr*