

P451**Uterine Artery Embolisation for Submucosal Fibroids: Efficacious and Safe?****Neeral Patel, Dermot Mallon, Alison Amoah, Aisling Fagan, Mohamad Hamady***Imperial College Healthcare NHS Trust, London, UK.
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Background: Uterine artery embolisation (UAE) is an accepted treatment option for the majority of uterine fibroids. UAE in the case of submucosal fibroids is more contentious given the potential risk of expulsion of necrotic material. The aim of this study was to determine the suitability of UAE in cases where submucosal fibroids exist and to assess the procedural outcomes and complications. **Method(s):** Retrospective data was collected for UAEs conducted over a five-year period at a single tertiary centre. Patients with pre- and post-procedure MRI studies as well as submucosal fibroids were included. Alterations in the volume of the uterus and size of the dominant submucosal fibroid were calculated pre- and post-UAE. Post-UAE complications and surgical interventions were also documented. Patient satisfaction was assessed using the 40-point uterine fibroid symptom quality of life (UFS-QoL) questionnaire. **Result(s):** Between 2013-2018, 281 female patients underwent UAE. Of these, 26 (9.3%) patients were found to have submucosal fibroids (mean age 47.5±5.0 years; range: 35-56). The mean pre-UAE uterine volume was 986.5±565.1 CC, while mean post-UAE uterine volume was 666.9±542.0 CC ($p<0.05$). The mean dominant submucosal fibroid size pre-UAE was 5.3±2.5 cm, and post-UAE was 3.25±2.74 cm ($p<0.05$). 100% of fibroids were effectively devascularised. 7.7% of patients experienced post-UAE pelvic infection. 41.2% patients underwent further surgical intervention, while 58.8% were discharged from clinic. **Conclusion(s):** UAE is a safe and efficacious treatment option for submucosal fibroids, however a high percentage of patients may require adjunctive surgical intervention to augment therapeutic results.

P452**Transarterial Genicular Artery Embolization as Treatment of Chronic Knee Pain in Patients with Osteoarthritis****Sergejs Pavlovics, Helmutis Kidikas, Janis Savlovskis, Yana Solskaya, Karlis Kupcs, Andris Veiss***Department of Interventional Radiology and Neuroradiology, Pauls Stradins Clinical University Hospital, Riga, Latvia.
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Background: Osteoarthritis is a common cause of pain and disability. Symptoms are seen in an approximately 10 % of people over the age of 55 years. Mild to moderate knee osteoarthritis resistant to medication therapy, yet not severe enough to warrant joint replacement, represents a challenge in its management. Recent publications demonstrated that transcatheter arterial embolization for chronic painful conditions resulted in excellent pain relief. Our goal is to demonstrate the safety and efficacy of transcatheter arterial embolization for mild to moderate knee osteoarthritis that is resistant to conservative

treatment. **Method(s):** We share our initial experience of four cases. Patients had moderate to severe medial knee pain (pain and total WOMAC* score) resistant to conservative therapy for at least 3 months. Patients were assessed by conventional radiography and MRI. Common femoral artery was punctured under local anaesthesia and percutaneous arterial access was obtained in an ipsilateral antegrade fashion. Abnormal neovessels were identified within soft tissue surrounding knee joint in all cases by arteriography. We used polyvinyl alcohol embolization particles 40-150 µm in two cases and 75 µm Embosphere microspheres in other two cases. Embolic agent was infused until hemostasis in pathological neovessels was achieved. The patients were discharged on the same day. **Result(s):** The technical success rate was 100 %. No major adverse events were related to the procedures. Knee pain of treated patients significantly decreased 1 month after the procedure. **Conclusion(s):** Transcatheter arterial embolization for mild to moderate knee osteoarthritis refractory to traditional nonsurgical management was effective, minimally invasive and safe treatment option.

P453**Transhepatic Permanent Dialysis Catheter Application: Single Center Experience in 300 Patients with End Stage Renal Disease****Ghada Samir Ibrahim, Karim Ahmed Abd El Tawab***Faculty of Medicine, Ain Shams University, Cairo, Egypt.
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Background: For patients on hemodialysis; when the AV Fistulae or grafts are exhausted, patients need tunneled dialysis catheters applied through Jugular, subclavian or femoral veins. Permanent dialysis catheter in hepatic veins as an alternative is used when the other routes are thrombosed. This study describes the technique and primary success rate of application of permanent dialysis catheter in hepatic veins. **Method(s):** From January 2015 to October 2018, 296 patients with thrombosed classic routes were presented to our unit for Transhepatic permicath application. Procedure was done under local analgesia. The chosen hepatic vein (Right in 128 patients, middle in 110 and left in 58 patient) was accessed by a 16 G Angiocath under ultrasound guidance. Under fluoroscopic guidance, a hydrophilic guide wire was introduced through the angiocath in hepatic vein and secured upwards in Inferior Vena Cava and atrium in 234 patients or downwards in Inferior Vena Cava in 60 patients, a split catheter was applied over 2 wires upwards and downwards in 2 cases. Peel away sheath was advanced over the wire. Subcutaneous tunnel was formed and the catheter was inserted over the wire through the peel away sheath over the wire. **Result(s):** Technical success rate was 100%. Mild shoulder pain was noted in some patients and managed conservatively. 183 patients had 6 months patency rate. 15 patients developed tunnel infection and thrombosis and had their catheters removed within the first 6 months. 11 patients developed thrombosis within the first few dialysis sessions. 1 patient developed fatal hepatic subcapsular hematoma. Rest of the patients could not be followed up. **Conclusion(s):** Combined ultrasound and fluoroscopic guided transhepatic permanent dialysis catheter application offers a reliable option with good short and mid term patency rates for patients with exhausted classic venous access routes.