

P454**A Clinically Driven New Classification for Aortic Dissections**

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Background: To report a new classification for aortic dissections (AD), based on a modified Stanford classification, to consider the aortic arch as a separate entity and integrate patterns influencing treatment strategy notably malperfusion syndrome (MPS). The proposed classification was evaluated in a large population of ADs. **Method(s):** All patients with proven de novo acute AD who were admitted to our hospital from 2005 to 2017 were included in this study. All pre-therapy CT angiographies were reviewed and reclassified using the new classification based on three types and four subtypes: Type: A, dissection involving at least the ascending aorta; Type B, dissection involving exclusively the descending aorta; and type C, dissection involving the aortic arch with/without descending aorta. Subtype: 0; absence of MPS; 1, dynamic MPS; 2, static MPS; 3, static and dynamic MPS. **Result(s):** A total number of 228 consecutive patients were included in the study. According to the new classification, AD were distributed as 153 type A, 50 type B (38B0, 5B1, 6B2, 1B3) and 25 type C (18C0, 6C2, 1C3). The new type represented 11% of all ADs. MPS was present in 28% of type C. Treatment strategies in type C included endovascular interventions and surgery in 32% and 12%, respectively. **Conclusion(s):** The new classification is easy to use and feasible in a large group population. It should be helpful driving the decision making process and especially in integrating the latest development in trans-catheter therapies.

P455**Pelvic Venous Reflux in Males with Varicose Veins and Recurrent Varicose Veins**

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Background: To report on a male cohort with pelvic vein reflux and associated primary and recurrent lower limb varicose veins. **Method(s):** Full lower limb duplex ultrasonography revealed significant pelvic contribution in eight males (3% of those presenting during the time period) presenting with bilateral lower limb varicose veins. Testicular and internal iliac veins were examined with either one or a combination of computed tomography, magnetic resonance venography, testicular, transabdominal or transrectal duplex ultrasonography. Subsequently, all patients received pelvic vein embolisation, prior to leg varicose vein treatment. Venography and Cross sectional Imaging depicts reflux from not only the internal iliacs but the testicular veins communicating avidly with the legs. **Result(s):** Pelvic vein reflux was found in 23 of the 32 truncal pelvic

veins and these were treated by pelvic vein embolisation. Four patients have since completed their leg varicose vein treatment and four are undergoing leg varicose vein treatments currently. **Conclusion(s):** Pelvic vein reflux contributes towards lower limb venous insufficiency in 3% males with leg varicose veins. Despite the challenges, we suggest that pelvic vein reflux should probably be investigated and pelvic vein embolisation considered in such patients to reduce risks of recurrence.

P456**Anatomical Abnormalities of the Pelvic Venous System and their Implications for Endovascular Management of Pelvic Venous Reflux**

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Background: Pelvic venous reflux is often treated with pelvic vein embolisation; however, atypical pelvic venous anatomy may provide therapeutic challenges. **Method(s):** We retrospectively over 100 patient files and reported symptoms and diagnostic imaging. Patients in which aberrant anatomy had been demonstrated was reviewed. We discuss the basic techniques of Pelvic Vein Embolisation and highlight in a pictorial review the range of anatomical abnormalities demonstrated in the female pelvis. **Result(s):** Anatomical abnormalities demonstrated included internal iliac veins draining into the contralateral common iliac vein, duplicated inferior vena cava, reverse-angle renal veins with atypical left ovarian vein drainage and direct drainage of the internal iliac vein to the inferior vena cava. All patients were successfully treated with pelvic vein embolisation. Catheter choice and approach to treatment when facing anatomical variations are shown. **Conclusion(s):** Abnormal embryological development may cause variable pelvic venous anatomy. Knowledge of this will enable interventional radiologists to successfully treat such patients. This pictorial review demonstrates the most commonly encountered abnormalities and the challenges to interventional radiology in Pelvic Vein Embolisation.

P457**The Efficacy and Safety of Radiofrequency Ablation As a Treatment Option for Benign Thyroid Nodules**

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Background: The aim of this study is to measure the efficacy and safety of radiofrequency ablation (RFA) as a treatment option for benign thyroid nodules. **Method(s):** The study includes 56 pathologically proven benign thyroid nodules from 50 patients as Bethesda II by two timely separated fine needle aspiration (FNA). All nodules were treated with RFA between January 2016 and December 2018 by interventional radiologist. The volume and size of the nodules were determined before treatment utilizing ultrasound evaluation. The response was retrospectively assessed using the volume reduction