ratio (VRR) by ultrasound examination at 6 months and 12 months post ablation procedure. Therapeutic success was defined as a >50% and 75% volume reduction at 6 months and 1 year, respectively. All minor and major complications were recorded. **Result(s):** The mean volume of nodule was 54.3 cm3 (42.6–291.5). The mean VRRs were 60.4±12.7% at 6 months and 81.4±11.8% at 1 year. Two patients (4%) had immediate voice changes and three patients (6%) had infection with sinus formation. **Conclusion(s):** Radiofrequency ablation is very effective in decreasing the size of the benign thyroid nodule.

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Contrast-Enhanced Ultrasound in Vascular and Interventional Radiology: Current Status and Future Perspective

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Background: Ultrasound (US) is the modality of choice for the workup of many vascular pathologies based on a plethora of advantages. However, US has inherent limitations including limited spatial resolution, and lower sensitivity to slow blood flow and vascular luminal irregularities. For evaluation of vascular pathology, angiography has long been considered the gold standard. Cross-sectional imaging techniques have gradually replaced angiography for the evaluation of many vascular beds, currently being regarded as the diagnostic imaging modality of choice for diagnosis of virtually almost every vascular disease leaving angiography mainly for treatment purposes. The introduction of microbubbles as ultrasonographic contrast agents has rendered contrast-enhanced ultrasound (CEUS) an evolving valuable complementary technique with markedly increased diagnostic accuracy for assessing both the macro- and microvascular anatomy of the vasculature. CEUS has a safety profile which is much favorable when compared to other contrast agents. Due to its superior spatial and temporal resolution, ability for prolonged scanning and dynamic and real-time imaging, it provides clinically significant additional information compared to the standard Duplex US. **Method(s):** In this communication, we discuss the currently available literature regarding vascular applications of CEUS, with special attention to the abdominal aorta, briefly elaborate on CEUS technique and present cases in order to illustrate the added value in the diagnosis and treatment of aortic pathologies. **Result(s):** CEUS enables imaging of adventitial vasa vasorum providing additional clinical utility since adventitial vasa vasorum has important implications in the pathogenesis of vascular diseases. The recent advances of CEUS along with ongoing development of drug-eluting contrast microbubbles has allowed improved targeted detection and real-time ultrasound guided therapy for aortic vasa vasorum inflammation and neovascularization in animal models. **Conclusion(s):** CEUS is uniquely suited to comprehensively assess and potentially treat vascular diseases in the future.

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Inferior Vena Cava Filters: Retrospective Review of a Single Center Experience

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Background: Venous thromboembolism is a preventable culprit of Pulmonary Embolism. PE remains a source of significant mortality and morbidity in Saudi Arabia, its exact incidence remains unknown, however, deaths due to VTE and PE range from 10-12% in inpatients. While most patients are managed by oral anticoagulants; many risk factors preclude their use and recurrent PE remains a major risk. IVC filters has been introduced since 1969, many filter types were developed since then which had better outcomes and less complications. In this review, we explored the indications, success and complications rate of IVC insertion in a large tertiary hospital in Saudi Arabia to compare it to the trends reported in the latest edition of Guidelines in the United States and Europe (CIRSE). **Method(s):** The medical charts of patients who had IVC insertion from 2011-2016 years were reviewed. Indications of insertion, outcomes, complications of IVC were collected. Categorial variables were summarized as proportion and percent. Continuous variables were summarized as mean and standard deviation. Data was analyzed using SAS. **Result(s):** Total of 411 patients were eligible based on the inclusion criteria. 61.07% males, 38.93% females. The main referring departments were Internal Medicine, Orthopedics, and Emergency Room 15.54% (n= 55), 13.84% (n= 49), 12.99% (n=13.84), respectively. Main indication for filter insertion in our sample was calculated based on the latest SIR guidelines. the most common indication of insertions was Absolute or relative contraindication to Oral anti coagulants 131 (37.86%) followed by PE or DVT and transient inability to anticoagulate in 65 (18.79%). 2.94% had history of thrombophilia and one patient (0.24) pregnant at the time of insertion and had thrombosis as a late complication. While 18.79% (n=65) of our patients did not have a clear indication documented to insert IVC filters. Thrombotic events were calculated in our sample and 52.94% (n=216) had only one thrombotic event. An increase of filters insertion was noted from 2011 (n=57) to 2016 (n=89). The institution has all filter types available most of the time, yet, Optease filters were inserted mostly (75.31%) followed by Denali (15.65%). 97.32% (n= 399) of filters were inserted infrarenally, while 2.20% were inserted suprarenally (n=9). In 0.49% (n=2) of our patients, IVC filter was inserted in the common iliac vein. We have lost long follow up due to different reasons in 55.42% (n=225) of our patients which is significant despite the follow up measures taken in our institution. Immediate complications did not occur in 83.90% (n=344). Most common immediate complication was tilting 13.66% (n=56). Mean duration of filter in situ was 91.91 days. No late complications occurred in 40.25% (n=163). Loss of follow up due to death and other causes occurred in 27.90% (n=113) and 21.48%