

thyroid nodules in the US images and faster convergence than other relevant methods. **Methods:** The purpose of this article is to introduce application and utilization of the CAD system in thyroid ultrasonography. After getting clear images of thyroid nodule along with longitudinal and traverse measurements, four parameters are calculated and displayed by the computer system automatically, which include microcalcifications, hypoechoic lesion, heterogeneity, and indistinct margin. **Results:** The results are displayed automatically with pointers in the semilunar figures. The necessity of FNAC depends on the size and numbers of positive findings along with percentage risk of malignancy. **Conclusion:** This CAD system is objective, reproducible, and easy to use. It can be easy to determine the necessity for FNAC, but what we must keep in mind is that this method can reduce the necessity of FNAC, not replace FNAC for the diagnosis of thyroid cancer. RFA of thyroid nodule is minimally invasive very good tool as mode of treatment.

#### P402

### Reduce Confusion! Using Combined Contrast Ultrasound and Fusion Technique During Radiofrequency Ablation of Liver Space-occupying Lesions

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**Background:** Purpose of this prospective study conducted in small oncology hospital is to highlight using either contrast-enhanced ultrasound (CEUS) with or without computed tomography (CT) fusion imaging to treat liver lesions well seen on positron emission tomography (PET)/CT or magnetic resonance imaging (MRI), but inconspicuous on ultrasound during radiofrequency and alcohol ablation of liver space-occupying lesions. **Methods:** Nine consecutive liver lesions; of size ranging from 1.2 to 4.7 cm; four metastatic and five primary HCC were subjected for US-guided radiofrequency or alcohol ablation earlier detected on either PET/CT or MRI. Using additional tools of CEUS or fusion imaging the pre, intra, and immediate post-RFA response was correctly judged; later confirmed on CT or PET study. In two cases, additional alcohol ablation was used to avoid heat sink effect due to main portal vein proximity and difficult RFA approach. **Results:** Except in two cases, all other lesions were considered as completely ablated based on pre- and post-CEUS enhancement pattern conducted before the patient was allowed to go home. One metastatic lesion showed definite peripheral enhancement and was reablated in additional sitting within next 2 h. In other case, CEUS showed minimal doubtful enhancement which on follow-up PET imaging was reported as post-RFA inflammatory response showing reducing standardized uptake values on repeat PET with absent enhancement on CEUS after 3 months. **Conclusion:** US guidance is at times handicapped by lack of confident identification of a lesion during ablation or by deciding the end-point of ablation merely on B-mode US due to difficulty in carrying out of immediate postablation PET/CT. This confusion can be minimized using real-time contrast US and fusion imaging to achieve the end-point.

#### P403

### Pictorial Review of Biliary and Enteric Stents: What a Radiologist Needs to Know

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**Background:** Enteric and biliary stents are important to recognize, however, these are commonly ignored and considered nonpathological in diagnostic imaging. Careful examination of the device is required to recognise common complications. Inexperience in the imaging appearances of such stents contributes to misinterpretation **Methods:** A pictorial review of biliary and enteric stents demonstrating how careful examination of such devices is essential to recognize and manage common complications. **Results:** We present a comprehensive pictorial review of metallic, biodegradable stents in a wide range of modalities. We discuss Imaging appearances of common complications of such stents including occlusion, migration, and fracture. **Conclusion:** A sound knowledge of the imaging appearances of enteric and biliary stents is essential to recognize common complications such as stent fracture and occlusion. Diagnostic radiologist needs to be aware of imaging appearance of a wide variety of stents in various modalities to facilitate prompt management when complications arise.

#### P404

### Fluoroscopic-Guided Self-Expandable Retrievable Esophageal Stent Application in Management of Postbariatric Surgery Anastomotic Leaks

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**Background:** Anastomotic leakage is a major complication of bariatric surgeries that can lead to high mortality and morbidity. Depending on the clinical presentation, management options include conservative management with or without external drainage, stenting, or surgical reintervention which carries relatively high morbidity and mortality rates. **Methods:** Self-expanding silicon stents were inserted under fluoroscopic guidance in 9 patients with radiologically diagnosed anastomotic leakage, 7 of them postbariatric gastric bypass operation and 2 patient after laparoscopic sleeve. Patients were referred for stenting between 7 and 26 days (mean 14 days) after surgery. Balloon repositioning was needed twice in one patient distal migration. The stent was left for 8 weeks in all patients. The patients were following a strictly fluid diet to avoid stent migration. Stents were removed endoscopically. The 9 patients were followed till removal of the stents. **Results:** A 100% technical success was achieved defined as successful positioning of the stent bypassing the leakage. Distal migration occurred twice in the same patient with balloon repositioning. Persistence of the leakage after stent removal took place in 4 patients (all were referred late 20 days post-surgery), 3 of which had resurgery and 1 patient who had residual tubular cutaneous-anastomosis fistula had track coiling with cessation of leakage. **Conclusion:** Fluoroscopic-guided esophageal stenting might be effective in bypassing anastomotic

leakages following bariatric surgeries; however, it should be considered as soon as significant leakage is diagnosed and should be considered before repeat surgery. Placement of the stents was feasible without major procedure-related complications.

#### P405

### Real-Time Elastography-Guided Prostate Biopsy Improves Cancer Detection Following Transrectal Ultrasound Biopsy: A Prospective Study of 392 Patients

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**Background:** Prostate cancer, the most common malignancy and the second leading cause of cancer-related death in men, is not only a major medical problem but also a significant public health issue because it may cause significant economic burden. **Methods:** Our study includes 392 men suspected of having prostate cancer on the basis of clinical and biochemical evaluation who underwent whole prostate analysis by real-time elastography (RTE) with identification of suspicious areas (hard areas) which are biopsied (2 cores by lesion) followed by 12 core systematic biopsy. We analyzed respectively the cancer detection rate of RTE and systematic biopsy. **Results:** Mean age of patients was 68.32 years (range 39–85) and mean prostate-specific antigen level was 12.73 (range 0.86–100). Cancer was found in 208 of 392 patients (53.06%). The rate of high-grade tumors (Gleason 8 and 9) was 19.71% (41 cases). RTE detected cancer in 71 patients (34.13%) and systematic biopsy detected it in 49 (23.55%). Positive cancer cores were found in RTE-targeted cores in 83 of 142 cases (58.45%) and in systematic cores in 511 of 4704 (10.86%). The cancer detection rate per core was 5.38-fold greater for targeted than for systematic biopsy. Comparison of B-mode US and RTE diagnostic accuracy in the detection of tumours located in the peripheral zone of the prostate gland showed a significant difference. **Conclusion:** RTE is an interesting complement to grayscale US to direct prostate biopsies; it reached a higher accuracy than B-mode ultrasound in the evaluation of the peripheral zone of prostate and in the selection of appropriate biopsy sites.

#### P406

### Management of Complex Hilar Obstruction in Interventional Radiology Room: Experience of a University Hospital Center

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**Background:** Palliation of patients with complex malignant hilar obstruction by self-expansive metallic stents insertion poses particular difficulties. Our study assessed the technical success, clinicobiological success, and complications

(short- and medium-term) of percutaneous biliary drainage of malignant hilar biliary obstruction using self-expanding metallic stents. **Methods:** This is a retrospective single-center study that included 27 patients with malignant hilar obstruction (Bismuth II, III, and IV) between January 2016 and September 2017. One or more self-expansive metallic stents were inserted across the stricture after failure to endoscopic drainage. Patients were evaluated 1, 3, and 6 months after stent placement. Clinicobiological data, imaging, and interventional radiology procedure were studied. **Results:** Successful stent insertion was achieved in 25 of 27 (92.6%) patients. Complete resolution of jaundice was achieved in 23 of 25 (92%) patients. In 2 of 27 (7.4%) cases, stent placement failure occurred. Early complications included cholangitis in 2 of 27 (7.4%) patients and stent occlusion in 1 of 25 (4%). Late stent occlusion occurred in 5 of 25 (20%) patients. Median stent patency was 183 days. Median patient survival was 204 days. **Conclusion:** Percutaneous biliary drainage with self-expansive metallic stents is safe, feasible, and achieves adequate drainage in the majority of patients with nonresectable complex tumors of the hepatic hilum.

#### P501

### Below the Knee Angioplasty in Diabetic Patients: Predictors of Major Adverse Clinical Outcome

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**Background:** The aim of the study was to determine the predictors of clinical outcome following percutaneous transluminal angioplasty (PTA) in diabetic patients with below-knee atherosclerotic lesions causing critical limb ischemia (CLI). **Methods:** Over 1 year, 67 patients underwent below-knee PTA. All of these patients were CLI patients (patients either manifested by rest pain or tissue loss). The composite end point of interest was major adverse clinical outcome (MACO) of the treated limb at follow-up which was defined as clinical failure, need for subsequent endovascular, or surgical revascularization or amputation. Freedom from MACO was assessed using Kaplan–Meier curves. **Results:** Successful limb salvage was seen in 88% with CLI. Complete wound healing was achieved in 76% of cases with a mean time to healing of 10.7 months. Significant predictors of MACO were technical failure ( $P = 0.002$ ) and occlusive lesions ( $P = 0.019$ ). We reported a percentage of 76.1% freedom of MACO. **Conclusion:** Below-knee PTA is a feasible therapeutic option in this diabetic population. Technical failure and occlusive lesions may be predictors of adverse outcome.

#### P502

### Acute Upper Extremity Deep Vein Thrombosis: Effectiveness of Superior Vena Cava Filter

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