

position, and were subjected to DRE. TRUS with a color Doppler for the detection of prostatic lesion using G. E. LOGIQ 5 PRO ultrasound color Doppler machine (with a TRUS probe [6–10 MHz]). Later, a TRUS-guided biopsy was performed using an 18G biopsy gun to confirm the radiological diagnosis. **Results:** Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 21.0 (IBM, New York, USA). A Chi-square test and a “*t*” test of independent samples were used to compare the data.  $P < 0.05$  indicated a significant association. Diagnostic efficacy was expressed in terms of sensitivity, specificity, positive predictive value, negative predictive value (NPV), and accuracy. The age of patients ranged from 51 to 77 years. The mean age of patients was  $63.80 \pm 6.76$  years. A majority of the patients were <65 years of age (65%); on DRE, a total of 17 (42.5%) patients had induration while 23 (57.5%) had nodular lesions. PSA values ranged from 5.8 to 9.8 ng/ml. Exactly half of the patients had PSA <8 ng/ml; histopathologically, 13 (32.5%) cases were malignant. On TRUS evaluation, a total of 10 (25%) cases were malignant. TRUS findings combined with color Doppler vascularity findings diagnosed malignancy in 15 (37.5%) cases. **Conclusion:** The findings of the present study showed that TRUS with color Doppler flowmetry can play an important role in the detection of prostate malignancy, with high sensitivity as well as specificity. The high NPV, as observed in the present study, could avoid unnecessary diagnostic invasive intervention. In the present study, TRUS diagnosis established 30 (75%) cases as benign and 10 (25%) cases as malignant, showing the rate of cancer detection to be close to that diagnosed through histopathology. Among different TRUS characteristics, irregular shape, heterogeneous echotexture, loss of differentiation between the peripheral and internal zones, increased mean prostate weight, and capsular invasion were found to be significantly associated with malignancy.

### P301

#### Challenges in Carotid Artery Stenting

**Sibasankar Dalai, Rv Narayana, Rajesh Pati**

*Sevenhills Hospital, Vizag, India.  
E-mail: sibasankar@gmail.com*

**Background:** Carotid artery disease is a significant cause of acute ischemic stroke and transient ischemic stroke. Significant carotid artery diseases are treated by carotid endarterectomy (CEA) or carotid artery stenting (CAS). **Methods:** We are presenting some challenging situations where patients with significant carotid artery diseases are not suitable/willing for surgery (CEA) and the anatomy too is challenging for CAS. Also presenting some seemingly straight looking CAS but pose serious intraprocedural challenges. **Results:** We could deal with the challenging situations with innovation and persistence. **Conclusion:** Understanding the nature of the carotid plaque is of paramount importance in doing a successful CAS. Imaging of the entire access is a must to carry out a successful CAS in most situations.

### P302

#### Assessing Readiness for Acute Stroke Mechanical Thrombectomy Service

**Essam Hashem, Karim Abdeltawab, Merhan Nasr, Hesham Mansour**

*Ain Shams University, Cairo, Egypt.  
E-mail: essamhashem@med.asu.edu.eg*

**Background:** Stroke is a leading cause of mortality and serious long-term disability. Recently published trials prove the superiority of endovascular mechanical thrombectomy (EMT) over best medical therapy, for selected patients with acute ischemic stroke. There is almost consensus that for optimum outcomes, onset-to-groin puncture time should be <6 h. The aim of our work is to assess our readiness to implement EMT, by evaluating aspects of delay in dealing with such time-critical group of patients. **Methods:** A prospective random sample of 20 patients presenting to our emergency department with acute stroke was selected. Total elapsed time from symptoms onset until release of emergency radiology report was measured and analyzed into five subcategories: from symptoms onset until decision to seek medical care (termed “awareness”); trip from home to hospital (“ambulance”); time spent in emergency room until arrival to radiology (“ER”); waiting time in radiology reception (“wait”); time until emergency radiology report release (“report”). **Results:** 2/20 (10%) were wake-up strokes, the other 18 cases had median time from onset to radiological diagnosis by CT, of 4:59:00. Previously described delay intervals are summarized in ascending order in this table. Median time (hours) (“ambulance” 02:17:30; “awareness”01:07:30; “ER”-00:55:00; “report”00:23:00; “wait”00:19:00; total-05:02:00). **Conclusion:** Assuming the interventionist reaches the hospital within 1 h, half of thrombectomy candidates can be started within the 6-h interval. There is an urgent need for mass media campaigns raising awareness regarding early manifestations of stroke. Emergency physicians should be educated about EMT, as most of them only knew about medical thrombolysis, whose window is only 4.5 h. Such unawareness can lead to slow management of patients presented beyond 4.5 h. A porter must be dedicated only for the transport of acute stroke patients. Radiology reception staff should be educated about the emergent nature of acute stroke-related scans and prioritize accordingly.

### P401

#### Efficacy of Computer-Aided Detection of Thyroid Nodule in Reduction of Unnecessary Fine Needle Aspiration Cytologies Along with Role of Radiofrequency Ablation in Thyroid Nodule Treatment

**Muhammad Fiaz**

*Superior University, Lahore, Pakistan.  
E-mail: drfiazfcp@gmail.com*

**Background:** AmCAD is a window-based computer-aided detection (CAD) device intended to assist the medical professionals for categorization of thyroid nodules through ultrasound. CAD is an objective way to determine which thyroid nodules need to have fine needle aspiration cytology (FNAC) and helping to reduce FNAC frequency in the thyroid. It saves workload, and there is no interobserver variation. Nodular thyroid disease is very frequent in clinical practice in Pakistan and worldwide. It is associated with increased risk of thyroid cancer and hyperfunction. In this paper, we propose a novel method for CAD of thyroid nodules in ultrasound (US) images followed by treatment if possible by Radiofrequency ablation (RFA). This novel method was experimentally evaluated using US images acquired from 24 patients. The results show that the proposed method achieves more accurate delineation of the