

## OR1.1

## Stroke Programs in Bahrain: Two Years' Experience and Expectations

Mohamed Elmahdy Ibrahim<sup>1,2</sup>*<sup>1</sup>Faculty of Medicine, Cairo University, Cairo, Egypt, <sup>2</sup>King Hamad University Hospital, Muharraq, Bahrain.  
E-mail: mmalmahdy@yahoo.com*

**Objectives:** The time factor is a critical parameter in the evaluation of the process and success of stroke programs. Door-to-computed tomography (CT) interpretation should be <45 min. Door to treatment should be <60 min. In our institution, we reached a door-to-treatment time as short as 20 min. **Methods:** On February 8, 2018, the first stroke code was activated in King Hamad University Hospital in Bahrain; to date, 565 stroke codes were activated. For patients presenting with acute neurological deficit to the emergency department, a total of 66 (11.7) patients were treated with revascularization therapy; patients were treated with only intravenous thrombolysis (34, 6.02%), only mechanical thrombectomy (17, 3%), or both (15, 2.65%). **Results:** In our institution, we reached a door-to-treatment time as short as 20 min. **Conclusion:** In our program, time management is an important factor of success in the management acute cerebrovascular stroke.

## OR1.2

## Safety of Carotid Revascularization without Embolic Protection Device: Preliminary Results and Experience in Pakistan

Qasim Bashir, Mahnoor Mohyidin<sup>1</sup>, Javed Iqbal*CMH Lahore Medical College, <sup>1</sup>Lahore Medical and Dental College, Lahore, Pakistan.  
E-mail: qbashir@hotmail.com*

**Objectives:** To assess the safety and clinical efficacy of carotid artery stenting with and without embolic protection device (EPD) for patients with symptomatic and asymptomatic carotid disease. **Methods:** We retrospectively reviewed our patient data from 2014 to December 2018 and present 100 patients with both symptomatic ( $\geq 50\%$  occlusion by digital angiography [DA],  $\geq 70\%$  by ultrasound, computed tomography [CT], and magnetic resonance angiography [MRA]) and asymptomatic ( $\geq 60\%$  by DA,  $\geq 70\%$  by ultrasound,  $\geq 80\%$  by CT and MRA) with extracranial carotid stenosis undergoing carotid stenting/angioplasty revascularization. All symptomatic patients had either experienced recurrent transient ischemic attacks (TIAs) or one or more stroke attacks and were treated with the best medical management and followed up postprocedure as per the Carotid Revascularization Endarterectomy versus Stenting Trial criteria. The primary endpoints were periprocedural any stroke, myocardial infarction (MI) or death, and ipsilateral stroke during the follow-up period. **Results:** Of the 100 patients, 60 were males and 40 were females; the mean age was 67 years. Eight percent were asymptomatic and 92% were symptomatic, with mean stenosis of 70%. There was no difference in age or cardiovascular risk factors. EPD was used in only eight cases

(14.8%). Minor stroke rate during the first 30 postoperative days was 1% (1 patient) with EPD and fatal stroke secondary to hyperperfusion syndrome in 2% (2 cases) with no MI. There was no difference in outcomes in those under 69 years of age or older than 70. No stroke occurred during the median 2 years of follow-up. **Conclusion:** Carotid revascularization with stenting and angioplasty in experienced hands is both safe and effective for patients with both symptomatic and asymptomatic carotid stenosis. Our results are comparable to those of previously reported major trials and well within the complication thresholds suggested in the current guidelines for both symptomatic and asymptomatic patients.

## OR1.3

## Endovascular Management of Ruptured Intracranial Arterial Aneurysms: Our Experience in the Last 2 Years

Asma Soud, Nadia Hammami Hmaied, Rym Sebai, Cyrine Drissi, Sonia Naji, Mohammed Ben Hamouda

*National Institute of Neurology Mongi Ben Hmida, Tunis, Tunisia.  
E-mail: asmasoud5@gmail.com*

**Objectives:** Ruptured intracranial arterial aneurysms are a diagnostic and therapeutic emergency. Endovascular treatment, consisting of conventional coiling with or without balloon remodeling, is becoming the first adequate treatment done promptly to avoid a recurrent rupture and improve patient outcome with a low thromboembolic and hemorrhagic risks. The objective of our study is to assess the feasibility, safety, and efficacy of endovascular coiling in our experience in the last 2 years. **Methods:** We carried a 2-year retrospective study (between January 2017 and January 2019) of 98 patients who were hospitalized for a ruptured intracranial arterial aneurysm and underwent an endovascular embolization using conventional coiling. **Results:** The study group of the patients included 43 men (44%) and 55 women (56%) with a mean age of 59 years. Twenty-nine patients (30%) had arterial hypertension. Headaches and vomiting were the main symptoms present together in 29 patients (30%). Fisher score varied from I to IV with a predominant IV score in 44 patients (49%). As for the World Federation of Neurological Surgeons score, it varied from I to V with a predominant I score in 74 patients (74%). Primary complications seen at the time of hospitalization were observed in 20 patients (20%): 10 patients (10%) had hydrocephalus and 11 (11%) patients had a neurologic deficit. Aneurysms were diagnosed using computed tomographic angiography in 39 patients (40%). Angiographic analysis showed that aneurysms occurred mainly on A1A2 junctions with the following distribution. Three patients had concomitant arteriovenous malformations. Intracranial arterial vasospasm was observed in angiography in 26 patients (27%), explaining the use of 2–8 mg of Nimotop. Balloon remodeling technique was used in 22 patients (22%). 11 (50%) of the latter had a carotid artery aneurysm. With regard to coiling, in the 86 patients (88%) where data were available for both coiling and aneurysmal measurements, we present the distribution of number of coils according to the aneurysmal measurements Figure 2. In 10 patients (10%), a residual neck was left. On case of aneurysmal