ACUTE ISCHEMIC STROKE ENDOVASCULAR THERAPY PROGRAM: NOVEL EXPERIENCE IN QATAR

P. Garcia-Bermejo¹, A. Zakaria², N. Akhtar¹, S.N. Patro², M. Saqqur¹, S. Kamran¹, G. Al Rumaihi³, M. Faisal¹, A. Ali³, Y. Zakaria¹, M. Ahmad¹, N. Amir¹, B. Garcia Cañibano¹, D. Deleu¹, A. Own², A. Shuaib⁴.
Neurology Department¹, Neuroradiology Department², Neurosurgery Department³, Clinical Pharmacy Department⁴, Neuroscience Institute⁵. Hamad General Hospital. Hamad Medical Corporation. Doha, Qatar.

Objectives.

We aim to describe our experience within a newly established Endovascular Therapy Program (EVT) Program in Qatar, and to compare our performance with international standards and recommendations.

Methods.

Qatar has a population of 2.6 million. Hamad General Hospital (HGH) is the only Tertiary Stroke Center. In this context, a novel EVT Program was created in February 2015 with a 24/7 on call team. Patients selected for EVT were prospectively registered. Demographics and performance measures were summarized and compared with an international interventional society (SVIN) recommendations.

Results.

From its inauguration until November 2017, 103 patients received EVT (mean age 49.6 ± 12.44 SD, 88.6% male, median NIHSS 15 (IQR: 11-19), 71 (68.9%) after iv rtPA, median number of passes 2 (IQR: 1-2). Comparison with SVIN recommendation is shown in Table 1. There were 2 (1.9%) patients complicated with embolisms in a non-Target Downstream Territory, 1 dissection and 1 groin hematoma.

Table 1. Comparison between local quality measures and SVIN recommendations.

Variable	HGH EVT Program	SVIN recommendations
Median Workflow times (IQR), minutes		
• Door to CT	22 (16-32)	< 10
• CT to Puncture	97 (69-115)	< 60
• Puncture to reperfusion	34 (18-58)	< 60
Reperfusion (mTICI 2b-3), %	83.5	> 50
Symptomatic intracranial hemorrhage, %	2.9	< 10
90 day mortality, %	3.9	< 25
90 day mRS ≤ 2 , %	50%	> 30

Thrombectomies per month

Recanalization rate per year

Good functional outcome at 3 months

Conclusion.

Workflow times until the groin puncture were above recommendations, nevertheless radiological and clinical endpoints were within. New strategies are being implemented to solve these deficiencies.