ENDOVASCULAR TREATMENT EXPERINCE OF ACUTE POSTERIOR CIRCULATION STROKE

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BACKGROUND: Approximately 20-25% of ischemic strokes are Posterior circulation stroke (PCS)¹. Early recognition of PCS may be difficult to recognise due to minor symtoms like dysarthria or diplopia. Identifying the etiology of posterior circulation stroke may be challenging. The vascular pathologies should be well analysed by appropriate imaging techniques. In selected patients stenting may be necessary to obtain stroke prevention. We reviewed acute PSC patients' data of a newly formed high-volume comprehensive stroke centre network.

METHOD: Between October - December 2017, all the patients who were consecutively admitted to the Brain Angiography and Stroke Centre (BASC), that contains three comprehensive stroke centers, were reviewed. The patients were evaluated with CTA, MRA and/or DSA. The BASC data is prospectively collected.

RESULTS: Of 186 acute stroke patients 41(%21) patients (mean age 65) were PCS. Median onset-to-door time was 746. These patients were admitted later than anterior circulation stroke (ACS) patients (ODT mean 813 and 440 respectively) (p:0.002). Four patients (9.8%) received IV r-TPA. As intention-to-treat 6 patients were evaluated with emergent DSA, only 3 of them received endovascular revascularization therapy. During hospitalisation period diagnostic DSA was performed in 7 more patients. Large vessel atherosclerotic disease detected in 18(43%) patients, 3 of whom also had AF. Seven patients underwent angioplasty/stenting therapy. Vertebral artery dissection was detected in 2 patients one of them treated with acute stenting.

DISCUSSION: The presence of vertebro-basilar stenosis identifies a group of patients with PCS who have a high early recurrent stroke risk. Early intervention is supposed to reduce recurrent stroke risk². Endovascular treatment of ABO with underlying significant vertebrobasilar steno-occlusive lesions is effective and reasonably safe. In selected patients these procedures may necessary to obtain seconder stroke prevention³. In our study, we observed that acute endovascular revascularization therapy was very effective to provide good early outcome also.

BASELINE DEMOGRAPHICS		N (%)
Gender (male/female)		23/18
Age Mean		65
Hypertension		33(80%)
Diabetes Mellitus		18(44%)
Hyperlipidemia		20(49%)
Atrial Fibrillation		11(27%)
Smoking		9(22%)
Previous İschemic Stroke		7(17%)
Coronary Artery Disease		8(20%)
Admission NIHSS median		4
Clinical Syndrome		
	LACS	10(24,4%)
	POCS	20(48,8%)
	TACS	5(24,4%)
Admission NIHSS >=10		12,50%
Onset to door time <6 h		14(34%)
Onset to door time >24 h OR unspecified		13(31%)
Large Vessel Stenosis Localisation		
	Basilar Artery	4(10%)
	Vertebral Artery	8(20%)
	Posterior ;Cerebral Artery	3(7,5%)

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