ENDOVASCULAR THERAPY (ET) EXPERIENCE IN WAKE-UP STROKES IN A REFERENCE HOSPITAL. COMPARISON WITH ENDOVASCULAR THERAPY IN KNOWN-ONSET STROKES.

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BACKGROUND AND PURPOSE

Wake-up strokes can be treated with ET by selecting the patients regarding to favorable radiologic findings (ASPECTS>6, good colateral arteries and favorable mismatch). Checking clinical results is important to find out if selection of patients is accurate.

METHODS

We implemented a descriptive analysis in the wake-up-stroke group that received ET in the period 2010-2018 in Virgen de la Arrixaca hospital. Statistical comparison with known-onset strokes that received ET was made using X2 and t-Student testing . SPSS 22,0 stadistics was used.

RESULTS

- Since 2010, 701 ET were performed in our Hospital. 79 of those patients suffered wake-up strokes (11.26%).
- The medium age was 64 years-old. 51.9% were males, 48.1 women. Cardiovascular risk factors (CVRF) found were: arterial hypertension (66.2%), dyslipemia (40.3%), diabetes mellitus (29.5%), atrial fibrillation (31.2%) and smoking habit (19.5%). Previous to stroke, 28.3% of patients took antiaggregants and 13% anticoagulants. Cerebral media artery was the most affected(48.1%). 10.4% had symptomatic intracranial hemorrhage. Mortality rate was 17.7%. 92.2% achieved good recanalization: Thrombolysis in Cerebral Infarction(TICI) 2b/3 . Rankin scale (mRs) <2 points three months after stroke was found in 35.1%.
- Comparing with the known-onset group, we did not find significant statistical differences in CVRF. Neither we found differences in mortality rate, symptomatic hemorrhage, mRs 3 months after stroke, or TICI scales. Stenting the carotid arteries during ET was more frequent in wake-up strokes (p<0.05, OR 2.2)

WAKE UP-STROKE		N	Media	Standard deviation	P value
NIHSS 24 h	No	522	11,36	9,321	0,361
	Yes	84	11,73	9,279	
NIHSS HOSPITAL DISCHARGE	No	486	7,81	7,637	3,322
	Yes	77	9,57	8,388	
NUMBER OF ATTEMPTS	No	119	2,471	1,8078	2,704
	Yes	30	2,100	1,2690	
PRODEDURE LENGHT	No	550	66,149	47,5085	0,507
	Yes	82	67,244	51,5717	
INR	No	43	1,3719	,52118	2,894
	Yes	10	1,1260	,34818	
SYSTOLIC BP	No	512	146,523	27,1752	0,55
	Yes	82	148,268	27,6142	
DIASTOLIC BP	No	512	77,549	15,1179	0,1
	Yes	82	78,024	14,5347	
GLYCEMIA	No	567	143,261	56,8989	5,399
	Yes	91	142,473	41,4574	
AGE	No	605	68,491	13,0913	0,477
	Yes	93	64,269	13,9215	

		WAKE UP-STROKE		X² Test
		No	Yes	
SEX CATEGORY	Male	297 (49.1%)	51(54.8%)	0,302
	Female	308(50,9%)	42(45,2%)	
ARTERIAL HYPERTENSION	No	198 (32,7%)	29 (31,2%)	0,767
	Yes	407 (67,3%)	64 (68,8%)	
MELLITUS DIABETES	No	445 (73,6%)	65 (69,9%)	0,459
	Yes	160 (26,4%)	28 (30,1%)	
DYSLIPIDAEMIA	No	345 (57,0%)	54 (58,1%)	0,85
	Yes	260 (43,0%)	39 (41,9%)	
ANTIAGGREGATION	No	406 (67,1%)	65 (69,9%)	2,885
	Yes	185 (30,6%)	25 (26,9%)	
ANTICOAGULATION	No	499 (82,5%)	82 (88,2%)	2,954
	Yes	100 (16,5%)	10 (10,8%)	
TICI SCALE	TICI 0,1,2a	42(7,0%)	6 (6,5%)	0,84
	TICI 2b/3	556(93,0%)	87(93,5%)	
RANKIN SCALE 3M	mRs>2	204(42,3%)	29(40,8%)	0,814
	mRs≤2	278(57,7%)	42(59,2%)	
STENT	No	499(82,9%)	64(68,8%)	0,001 OR: 2.195
	Yes	103(17,1%)	29(31,2%)	
INTRACRANIAL HAEMORRHAGE	No	544(91,0%)	83(90,2%)	0,816
	Yes	54(9,0%)	9(9,8%)	
DEATH	No	439(76,5%)	70(80,5%)	0,411
	Yes	135(23,5%)	17(19,5%)	

CONCLUSIONS

Endovascular treatment in wake-up strokes is as effective as in known-onset strokes if patients are selected properly. We do not found clinical or outcome differences in our sample.