12-MONTH OUTCOME IN PATIENTS WITH STROKE AND ATRIAL FIBRILLATION NOT DISCHARGED ON ANTICOAGULANT: THE WATCH-AF REGISTRY

Céline Guidoux¹, Elena Meseguer¹, Elodie Ong², Philippa Lavallée¹, Cristina Hobeau¹, Lindsay Monteiro Tavares¹, Lucie Cabrejo¹, Anna Martin Bechet¹, Ricardo Rigual¹, Norbert Nighoghossian², Pierre Amarenco¹

¹ Department of Neurology, Bichat University Hospital, Paris France. ² Department of Neurology, Hospices Civils de Lyon, Lyon France.
Correspondence: celine.guidoux@aphp.fr

INTRODUCTION

In patients with acute stroke associated with atrial fibrillation (AF) many cannot be discharged on oral anticoagulant. Outcome of these patients compared to those on long-term oral anticoagulant (LTOAC) is not well known.

METHOD

Consecutive patients admitted within 24 hours of symptom onset of an acute stroke associated with AF in two stroke centers had systematic CHADSVASC, HASBLED, ATRIA, NIHSS, mRS, Barthel, IADL, MMS, STRATIFY scores as well as INR, TTR, GFR collected 6 and 1 months before stroke, at admission, discharge, 2 and 8 days, 3, 12 months post stroke. The primary endpoint was death or dependency (mRS≥4) and secondary endpoint recurrent brain infarction or hemorrhage.

RESULTS

Among 400 patients enrolled in WATCH-AF registry (369 brain infarction, 29 brain hemorrhage, 2 both), mean age was 79 years. Baseline NIHSS was ≥5 in 32.1% of patients (Table 1). Among 370 patients alive at discharge (30 died before discharge), 131 patients were not discharged on LTOAC (too frail-bedridden or demented, patient refusal, temporary or definitive contra-indication to LTOAC). At 12 months, the primary and secondary endpoints occurred in 24.3% [95% CI, 19.2-30.4] and 8.7% [95% CI, 5.7-13.1] respectively in 239 patients discharged on LTOAC, and 46.1% [95% CI, 38.0-55.0] and 25.4% [95% CI,18.7-34.1] in those not on anticoagulant (p<0.001 for both). (Table 2; Figures 1 and 2)

CONCLUSION

Patients not discharged on LTOAC have a high risk of death or dependency at 12 months. Treatment such as left atrial appendage closure should be trialed.

Table 1. Baseline characteristics of patients

	Overall (N=400)	Ischemic stroke (n=371)	Hemorrhagic stroke (n=31)
Age, mean (SD), years	79 (11)	79 (11)	79 (10)
Men	193 (51.7)	177 (47.7)	18 (58.1)
Medical history			
Hypertension	317 (79.2)	297 (80.0)	22 (71.0)
Diabetes	87 (21.7)	80 (21.6)	9 (29.0)
Dyslipidemia	168 (42.0)	158 (42.6)	11 (35.5)
Former smokers	116 (30.1)	108 (30.1)	8 (29.6)
Current smokers	32 (8.3)	29 (8.1)	3 (11.1)
Cerebrovascular disease	89 (22.3)	83 (22.4)	7 (22.6)
Coronary artery disease	68 (17.0)	63 (17.0)	5 (16.1)
Peripheral artery disease	30 (7.5)	30 (8.1)	0 (0.0)
Congestive heart failure	53 (13.3)	48 (13.0)	5 (16.1)
Significant valvular disease or prosthetic heart valves	38 (9.5)	32 (8.6)	6 (19.3)
Scores			
NIHSS score, median (IQR)	2 (0-6)	1 (0-6)	5 (2-11)
0	109 (29.6)	106 (30.7)	3 (12.0)
1-4	141 (38.3)	134 (38.8)	9 (36.0)
5-9	53 (14.4)	49 (14.2)	4 (16.0)
10-20	51 (13.9)	42 (12.2)	9 (36.0)
≥21	14 (3.8)	14 (4.1)	0 (0.0)
CHA2DS2-VASc score, median (IQR)	4 (3-5)	4 (3-5)	4 (3-5)
0	7 (1.7)	6 (1.6)	1 (3.2)
1	22 (5.5)	21 (5.7)	1 (3.2)
2	46 (11.5)	42 (11.3)	4 (12.9)
3-4	178 (44.6)	168 (45.4)	11 (35.5)
≥5	146 (36.5)	133 (35.8)	14 (45.2)
HASBLED score, median (IQR)	2 (2-3)	2 (2-3)	2 (1-3)
<3	132 (62.6)	115 (60.5)	17 (73.9)
≥3	79 (37.4)	75 (39.5)	6 (26.1)
ATRIA score, median (IQR)	3 (1-3)	3 (1-3)	3 (2-3)
Examinations			
BMI, mean (SD), kg/m²	25.6 (5.0)	25.7 (5.1)	25.0 (4.5)
Systolic BP, mean (SD), mmHg	149 (26)	147 (25)	165 (32)
Diastolic BP, mean (SD), mmHg	78 (16)	78 (15)	85 (22)
Glucose, median (IQR), mg/dl	107 (93-135)	106 (95-130)	120 (93-142)
Hemoglobin A1C, median (IQR),%	5.9 (5.6-6.6)	5.9 (5.6-6.6)	6.0 (5.6-6.8)
Creatinine, median (IQR) umol/L	86 (71-110)	87 (70-111)	89 (72-111)

Table 2. 12-months event rate according to LTOAC treatment in patients alive at discharge

	One-year event rate		p-value
	Not LTOAC (N=131)	On LTOAC (N=239)	
Death and dependency	60 (46.1)	55 (24.3)	<0.001
Brain infarction, brain hemorrhage	32 (25.4)	20 (8.7)	<0.001
Brain infarction	22 (17.8)	17 (7.4)	0.004
Brain hemorrhage	14 (11.0)	7 (3.1)	0.002