

## STROKE:

**NOT JUST AN OLD AGE PROBLEM, IT IS TIME FOR CONCRETE ACTIONS.**

**AOUC's 24-year experience with young stroke patients (2000-2024)**



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### STROKE WORDWIDE

→2° most common cause of death   
→3° most common cause of DALYs   
Overall **incidence** is reducing ↓

### YOUNG STROKE (<55 YRS)

Overall **incidence** is increasing ↑  
Young males  
Accumulation of  
**traditional vascular risk factors**

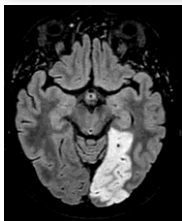
### MATERIALS, METHODS and AIMS

Paper and digitalized clinical reports. Retrospective, monocentric study that included consecutive patients admitted to the Stroke Unit of AOUC from 01/01/2000 to 31/09/2024, from 18 to 50 years old, discharged with diagnosis of cerebral stroke. AIMS: determine clinical presentation, risk factors, stroke aetiologies and outcomes (functional, recurrence and death).

### RESULTS

#### POPULATION

543 pts  
(46,2% F)  
median age  
41,14yrs



#### CARDIOVASCULAR RISK FACTORS

active smoking 43%; arterial hypertension 30%; dyslipidemia 28%;  
estrogenic therapy 15%

- **Subtype:** ischaemic 86%; haemorrhagic 5,6%; cerebral venous thrombosis 8,6%
- **TOAST:** first 3 categories 21,6%; cervical arteries dissection (21%); patent foramen ovale (18%); cryptogenic (26%)
- Average **NIHSS:** at admission: 7,5 (2000 → 2024, 6 → 10); at discharge: 3,2
- Any **acute phase therapy** administered (41,3%): intravenous thrombolysis (15,4%), endovascular treatment (13,5%), combined treatment (12,4%)
- **Follow up:** 203 patients. Average follow-up period of 2,72 years.
- **Functional independence (mRS 0-2):** progressively worsening over time from 83,5% in 2015-2018, to 75,8% in 2022-2024.

### DISCUSSION

- ✓ **Rising prevalence of cardiovascular risk factors:** grown of average age ischaemic stroke onset (from 37 to 43,5 years old)
- ✓ **Increased NIHSS at admission:** AOUC's role as hub, rising patients' age
- ✓ **Increased acute phase treatment:** increased general population awareness; better functioning of emergency network
- ✓ **Reduction of cryptogenic strokes** (from 36,7% to 11,3%): enhanced healthcare worker expertise
- ✓ **Functional outcome worsening:** increase of NIHSS and age at admission, management of more severe cases and a shorter follow-up period

1. Lancet Neurol. 2024 Oct;23(10):973-1003; 2. JAMA Neurol. 2022 Oct 1;79(10):1036-1048; 3. Eur Stroke J. 2025 Feb 6:23969873251317347

24-28 Ottobre 2025  
Padova Congress

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