EXAMPLES OF PROFESSIONAL IMPLEMENTATION 2009 – 2014

• 2010 Emergencies congress (SFMU): poster session on the subject of stroke management in the acute phase; practical workshop on the management of stroke in the acute phase
• Programme for improving the management of vascular emergencies in radiology (G4)
• Information campaigns about stroke and calling the emergency medical service, public posters for doctors’ office (SFNV, SFC, SFMU) - National declaration of World Stroke Day 2009
• Practice registers gathering clinical practice indicators: Emergency stroke units (ORU MIP in Midi Pyrénées, RUN-FC in Franche Comté, Lille, REGLO in Lorraine, DIVA in Dijon, Brest University Hospital, RESCU in Rhône Alpes, etc.)
• Programme of training in stroke management in the acute phase (AVC 69, Lyon University Hospital)
• Establishment of a regional operational network for stroke management in Picardy (Amiens University Hospital)
• Development of telemedicine tools by the Réseau des Urgences Neurologiques de Franche Comté [Neurological Emergency Network of Franche Comté] (RUN-FC)
• National audit of initial hospital management of stroke (SFNV, HAS)
• Improvement of the intrahospital care pathway for stroke management (Dijon University Hospital)


“Together, let’s improve practices for stroke management”

A progress report in 2010

Phase 1

FROM WARNING SIGNS TO HOSPITAL

It is estimated that every year, approximately 130,000 people in France are affected by stroke, 25% of them are under 65 years of age.

With 30,000 cases of severe disability and 40,000 deaths every year, stroke is the most frequent cause of non-traumatic acquired disability, 2nd for dementia, and 3rd in mortality.

Immediate management with rapid treatment and rehabilitation subsequently adapted to the patient throughout the chain of care, enables to reduce mortality, disability/handicap and recurrences.

The objective of this programme, carried out with healthcare professionals, is to reduce stroke-related mortality and disability through by acting on each of the 3 phases of stroke care pathway:

1. from “warning signs” to hospital
2. the acute hospital phase
3. the first year after the stroke

A thematic meeting devoted to improving stroke management is to be organised. The health professionals involved in stroke management will share their clinical experience, the problems encountered, the actions and the approaches for practice improvement, plus the measures of clinical impact.

TO FOLLOW IN 2011 … 2012

A thematic meeting devoted to improving stroke management is to be organised. The health professionals involved in stroke management will share their clinical experience, the problems encountered, the actions and the approaches for practice improvement, plus the measures of clinical impact.

©Haute Autorité de Santé

June 2010
WHAT IS KNOWN

What are the signs of a stroke? Usually, stroke is manifested in the sudden onset of one or more of the following signs: (F) drooping on one side of the face when asked to smile (A) one of the arms cannot be raised normally (S) speech problems. Sometimes, there is numbness or weakness of the leg, abrupt dimming or loss of vision on one or both sides, or severe headache. If the signs subside spontaneously, it may be a transient ischaemic attack (TIA); there is the same urgency and need for appropriate management as the risk of early recurrence (i.e. within 24 h) is high.

What should be done in case of a stroke? (T) Anyone witnessing a stroke, the attending physician, the patient, or the patient’s circle must call centre 15 (SAMU, the emergency medical service). SAMU will decide what is the quickest way – and the most appropriate to the patient's needs – of getting him to an establishment where he can be given suitable care: It will send an ambulance from SMUR [mobile emergency resuscitation service] or a private ambulance. The patient should remain in a lying position until help arrives.

F: Face
A: Arm
S: Speech
T: Time

FAST: mnemonic aid for remembering what action should be taken
recalling the 3 signs of a stroke
If F, A, or S is present, call 15 immediately T

What medical care will be given? The coordinating SAMU doctor will contact the referent doctor of the neurovascular unit to organize early care management. As soon as the patient arrives at the establishment, he will undergo an MRI or CT scan of the brain to confirm the diagnosis of stroke and to determine whether it is due to a cerebral infarction (blocked artery) or a cerebral haemorrhage. In case of a cerebral infarction (80% of stroke cases) and if the patient receives care within the first few hours, thrombolysis (injection of a product that unblocks the artery) may be used. In all cases, the patient will be cared for in a department involved in the stroke care pathway in order to optimise the management and reduce the risk of disability.

The risk of death and disability after a stroke can be greatly reduced: any gain in time means a gain in survival with better quality of life.

The coordinating SAMU doctor will contact the referent doctor of the neurovascular unit to organize early care management. As soon as the patient arrives at the establishment, he will undergo an MRI or CT scan of the brain to confirm the diagnosis of stroke and to determine whether it is due to a cerebral infarction (blocked artery) or a cerebral haemorrhage. In case of a cerebral infarction (80% of stroke cases) and if the patient receives care within the first few hours, thrombolysis (injection of a product that unblocks the artery) may be used. In all cases, the patient will be cared for in a department involved in the stroke care pathway in order to optimise the management and reduce the risk of disability.

The coordinating SAMU doctor will contact the referent doctor of the neurovascular unit to organize early care management. As soon as the patient arrives at the establishment, he will undergo an MRI or CT scan of the brain to confirm the diagnosis of stroke and to determine whether it is due to a cerebral infarction (blocked artery) or a cerebral haemorrhage. In case of a cerebral infarction (80% of stroke cases) and if the patient receives care within the first few hours, thrombolysis (injection of a product that unblocks the artery) may be used. In all cases, the patient will be cared for in a department involved in the stroke care pathway in order to optimise the management and reduce the risk of disability.

KEY FIGURES AND LANDMARKS*

There is still little awareness of the signs of stroke in France: only 30% of the population understand that sudden weakness on one side can be a sign of stroke. Fewer than half of people with stroke (stroke patients) are cared for by the SAMU. Far too many patients arrive too late: only 1% of people with stroke receive thrombolysis, even though it is estimated that at least 15% of stroke patients could benefit from it.


PRORITY OBJECTIVES FOR IMPROVING PRACTICE

- To promote that all stroke patients are dealt within the optimal care pathway by immediately calling 15 (SAMU), by providing regular information to the public and health professionals
- To perform urgent imaging to identify as quickly as possible cerebral infarction cases that may benefit from thrombolysis
- To develop monitoring of practice (surveys, practice registries, etc.) to measure and improve the speed and quality of stroke management and, in particular, the thrombolysis rate

NEW PROFESSIONAL REFERENCES 2010 - 2014

In 2010, shared and consensual clinical practice indicators (CPI) developed by all the professions involved in stroke management allow to improve and to monitor practices in time. They are based on key care elements:
- Was 15 for SAMU called in the 1st instance?
- How long is the interval between the initial symptoms and the entry into the stroke care pathway?
- Is the NIHSS score measured in the neurological examination of the patient?
- How soon is the radiological examination essential to diagnosis performed?
- Does the patient undergo first-line MRI?
- Was the imaging immediately interpreted with a written report by the radiologist?
- Is the neurovascular unit doctor contacted as soon as the patient enters the stroke care pathway?
- How long is it before the patient undergoes a neurovascular assessment?
- Is the cerebral infarction patient eligible for thrombolysis benefiting from thrombolysis?
- Is the patient oriented to the neurovascular unit?
- Wherever he is, is the patient dealt with according to neurovascular care pathway specialized protocols?

These CPI were developed on the basis of numerous recommendations and professional references, according to the CPI method (HAS 2009)
- Initial management of adult stroke patients – Medical aspects (HAS 2002)
- Initial management of adult stroke patients – Paramedical aspects (HAS 2002)
- The place of the neurovascular unit in the management of stroke (HAS 2002)
- Imaging of acute stroke (HAS 2002)
- Diagnostic management and treatment of adult TIA (HAS 2004)
- Stroke: early management (HAS 2009)
- ...

Works In progress
- Protocol for the management of suspected stroke in the A&E emergency services (HAS 2010 - 2011)
- Decision-making tools for dependent patients (HAS 2010 - 2011)