



## Hemorrhagic and ischemic strokes in medical emergencies and procedures

*Hemorrhagic and ischemic strokes in medical emergencies and procedures*

Aline Lima dos Anjos

Eduardo Ferreira Marques Sá

Gabriella Santos Diniz

Isabella Wilson Paiva Goncalves

Marcela Aparecida de Sousa Lopes Minari

### SUMMARY

Stroke is one of the main causes of death and disability in Brazil and worldwide. Medical intervention in the first hours after the event is essential to reduce sequelae and mortality. This study aimed to review the main types of hemorrhagic and ischemic stroke in the context of medical emergencies, as well as to describe updated clinical procedures.

**Keywords:** Stroke. Medical emergency. Cerebral ischemia. Hemorrhage. Medical procedures.

### ABSTRACT

Stroke is one of the leading causes of death and disability in Brazil and worldwide. Medical intervention in the early hours after the event is essential to reduce sequelae and mortality. This study aimed to review the main types of hemorrhagic and ischemic stroke in the context of medical emergencies and describe updated clinical approaches.

**Keywords:** Stroke. Medical emergency. Cerebral ischemia. Hemorrhage. Medical conduct.

## 1. INTRODUCTION

A stroke is a neurological emergency that demands immediate medical action to preserve life and neurological function. It can be classified as ischemic, when there is obstruction of blood flow, or hemorrhagic, when there is rupture vascular. According to Machado et al. (2020), rapid recognition of clinical signs and early referral are crucial factors for a favorable prognosis.

## 2 THEORETICAL FRAMEWORK

Ischemic stroke accounts for about 80% of cases and is often associated with thrombosis or embolism. Hemorrhagic stroke, which is more lethal, results from the rupture of blood vessels, generally related to high blood pressure. Holmes and Hopkins (2019) highlight the advances

recent developments in interventional cardiology and its integration with acute stroke care, especially in supporting in-hospital treatment.

### 3. MATERIAL AND METHOD

This study was developed through a literature review, searching for articles scientific articles published between 2018 and 2023 in the PubMed, SciELO and LILACS databases. The following were included: works that addressed medical procedures in cases of ischemic and hemorrhagic stroke in the environment emergency.

### 4. RESULTS AND DISCUSSION

The literature consulted highlights that the initial approach should prioritize clinical stabilization and performing imaging tests to differentiate the type of stroke. Thrombolysis is indicated in ischemic cases within the therapeutic window, while the management of hemorrhagic stroke requires strict control of blood pressure and, in some cases, neurosurgery. Brandão et al. (2020) point out that delays in care directly impact the effectiveness of medical procedures and outcomes clinical.

### 5. FINAL CONSIDERATIONS

Effective treatment of strokes depends on early recognition of symptoms, early agile for reference centers and the adoption of evidence-based practices. Investments in medical training, hospital infrastructure and awareness campaigns are essential for reduce mortality and improve the rehabilitation of affected patients.



## REFERENCES

ALVES, AE et al. Mechanical thrombectomy in acute ischemic stroke: literature review. *Medical Archives*, v. 63, n. 2, p. 110-114, 2018. Review.

BRANDÃO, PC; FERRAZ, MO; SAMPAIO, ES Delay in arrival of people with stroke to a referral hospital service. *Nursing Journal*, v. 23, n. 271, p. 4979-4984, 2020.

HOLMES, DR; HOPKINS, N. Advancing interventional cardiology and acute stroke care. *Journal of the American College of Cardiology*, v. 73, n. 12, p. 47-54, 2019.

LEIBINGER, F. et al. Which patients require physician-led inter-hospital transport in view of endovascular therapy? *Cerebrovascular Diseases*, vol. 48, no. 3-6, p. 171-178, 2019.

MACHADO, VS; HAHN, LM; MARTINS, MI; MARRONE, LC Knowledge of the population about stroke in Torres RS. *Brazilian Journal of Neurology*, v. 56, n. 3, p. 11-14, 2020.