

# Abstracts

## Atypical presentation of glioma tumor: autopsy results

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### Abstract

**Background:** A brain tumor can appear in post-ischemic areas, and due to increased proliferation, venous thrombosis, hypercoagulability, and local factors it can induce stroke. These two conditions can mimic each other. The aim of the study was to analyze the missed cerebral glioma cases due to atypical presentation.

**Material and methods:** A retrospective analysis of autopsy protocols from 2017 till 2019 was performed and 17 cases of glioma clinically missed but identified at necropsy were selected.

**Results:** The mean age was  $59.116 \pm 14.33$  years, mean hospital stay  $23.8 \pm 23.5$  days, undergone surgeries 41.2% of cases. Cardiovascular risk factors: hypertension – 88.2%, diabetes – 29.4%, obesity – 23.5%, ischemic heart disease – 58.8% and history of stroke – 17.6%. Imaging described as ischemia – 56.3% of cases, hemorrhage – 47.1%, infections – 11.8%, multiple lesions – 52.9%. Tumor was suspected just in 23.5% of cases. Established discharge diagnoses: hemorrhagic stroke – 29.4%; ischemic stroke – 29.4%; ICH – 11.8%, CNS infections – 17.6%; tumor with another location – 11.8%. Histology confirms grade II gliomas in 11.8%, grade III – 29.4%, and grade IV – 58.8% according to the WHO classification. There was also detected during necropsy associated hemorrhagic stroke in 29.8% of cases, ischemic stroke – 11.8% or infection in 50% of cases.

**Conclusions:** The study showed that gliomas can present atypically from clinical and imaging point of view as ischemic or hemorrhagic stroke, which suggests the need to follow a well-established diagnostic protocol and increased awareness.

**Key words:** glioma, ischemic stroke, atypical, mimic, autopsy.

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## Pulmonary embolism in stroke patients: autopsy results study

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### Abstract

**Background:** Pulmonary embolism is a major contributor to in-hospital mortality after stroke and accounts for up to 50% of early deaths. The clinical picture could be unremarkable, so the complication is not recognized in a timely manner. The purpose of the study was to analyze the missed cases of pulmonary embolism after stroke.

**Material and methods:** A retrospective analysis of autopsy protocols from 2017 till 2020 was performed and 13 cases of thromboembolism clinically unidentified but detected at necropsy were selected.

**Results:** The study sample consists of 5 men (38.5%) and 8 women (61.5%) aged 47 – 83 years. By CT were confirmed as ischemic stroke 6 pts (46.8%), hemorrhagic stroke – 4 pts (30.1%) one of them underwent surgery (7.69%), ischemic stroke with hemorrhagic transformation – 3 pts (23.1%). It was the first event for 11 pts (84.61%) and 2 pts (15.4%) with recurrent stroke. Major cardiovascular risk factors were: hypertension – 2 pts (92.3%), obesity – 8 pts (61.5%), diabetes mellitus – 5 pts (38.46%), atrial fibrillation – 5 pts (38.46%), 1 patient (7.69%) with thrombosis in other areas. Autopsy results indicate pulmonary embolism as the direct cause of death in all patients, but just 2 pts (15.38%) presented suggestive clinical signs.

**Conclusions:** Patients with stroke are at higher risk of pulmonary embolism due to bed rest, limb paralysis and predisposing risk factors but just a small number of patients are recognized timely to act, that's why it is important to establish strict protocols and high awareness.

**Key words:** stroke, pulmonary embolism, risk factors, complications, death.

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