



Pathology Biology Section – 2010

G43 Glioblastoma – Cause of Sudden Death on an Apparently Healthy Woman

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After attending this presentation, attendees will learn the importance of performing a complete autopsy in cases of sudden unexpected death, completed with a meticulous neuropathological examination, mainly in the cases where an extracranial cause of death was not found.

This presentation will impact the forensic science community by the report of a very rare case of sudden unexpected death by an undiagnosed glioblastoma.

Sudden unexpected deaths due to primary brain tumors are very rare in forensic pathology practice. Nowadays, most fatal brain tumors are diagnosed before a fatal outcome, based upon neurological manifestations and imaging techniques, such as computed tomography and magnetic resonance imaging. Glioblastomas are the most common primary brain neoplasms and account for more than fifty percent of the malignant gliomas. Usually they cause headaches, seizures and focal neurological deficits according to their anatomic location in the brain.

A case of a 44-year-old woman, who was found dead in her bed, resting naked with her body lying down ventrally. According to relative's statement she was apparently a healthy woman.

The autopsy revealed a vast "froth mushroom" covering her mouth and nostrils, as well as a marked cerebral edema with a cystic yellow lesion on the white matter of the right fronto-parietal lobe, surrounded by hemorrhagic foci. Neuropathological examination established the diagnosis of glioblastoma, grade IV according to WHO (World Health Organization).

The importance of performing a complete autopsy in cases of sudden unexpected death, complemented with a meticulous neuropathological examination, mainly in the cases where an extracranial cause of death wasn't found will be highlighted. **Glioblastoma, Brain Tumor, Sudden Death**