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Gliosarcoma with extensive extracranial metastatic spread and familial coincidence: A case report

L L Friker¹, T Tzaridis², S J Enkirch³, C Lüders⁴, E Hattingen³, G Kristiansen⁴, T Goschzik⁵, A Waha⁵, C Lütter⁶, J Weller⁷, U Herrlinger⁷, T Pietsch⁵, M Gessi⁵, B G Baumert⁸, G H Gielen⁹

- 1 Institute of Neuropathology, University Hospital Bonn, Venusberg-Campus 1, 53127 Bonn, Germany. Electronic address: Lea.Friker@ukbonn.de.
- 2 Division of Neurooncology, Department of Neurology, University Hospital Bonn, Bonn, Germany; Tumor Initiation and Maintenance Programme, Sanford Burnham Prebys Medical Discovery Institute, La Jolla, USA.
- 3 Division of Neuroradiology, Department of Radiology, University Hospital Bonn, Bonn, Germany.
- 4 Institute of Pathology, University Hospital Bonn, Bonn, Germany.
- 5 Institute of Neuropathology, University Hospital Bonn, Venusberg-Campus 1, 53127 Bonn, Germany.
- 6 Department of Radiosurgery and Stereotactic Radiotherapy, MediClin Robert Janker Clinic and MediClin MVZ Bonn, Villenstrasse 8, 53129 Bonn, Germany.
- 7 Division of Neurooncology, Department of Neurology, University Hospital Bonn, Bonn, Germany.
- 8 Department of Radiosurgery and Stereotactic Radiotherapy, MediClin Robert Janker Clinic and MediClin MVZ Bonn, Villenstrasse 8, 53129 Bonn, Germany; Institute of Radiation-Oncology, Kantonsspital Graubünden, Loestr. 170, 7000 Chur, Switzerland.
- 9 Institute of Neuropathology, University Hospital Bonn, Venusberg-Campus 1, 53127 Bonn, Germany. Electronic address: Gerrit.Gielen@ukbonn.de.

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Abstract

Gliosarcoma is a rare histopathological subtype of glioblastoma. Metastatic spreading is unusual. In this report, we illustrate a case of gliosarcoma with extensive extracranial metastases with confirmation of histological and molecular concordance between the primary tumor and a metastatic lesion of the lung. Only the autopsy revealed the extent of metastatic spread and the hematogenous pattern of metastatic dissemination. Moreover, the case bared a familial coincidence of malignant glial tumors as the patient's son was diagnosed with a high-grade glioma shortly after the patient's death. By molecular analysis (Sanger and next generation panel sequencing), we could confirm that both patient's tumors carried mutations in the TP53 gene. Interestingly, the detected mutations were located in different exons. Altogether, this case draws attention to the fact that sudden clinical aggravation could be caused by the rare phenomenon of metastatic spread and should therefore be always taken into consideration, even at an early disease stage. Furthermore, the presented case

highlights the contemporary value of autoptic pathological examination.

Keywords: Autoptical findings; Case report; Extracranial metastases; Gliosarcoma; TP53 mutation.

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