



Centre universitaire de santé McGill  
McGill University Health Centre

**Institut et Hôpital Neurologiques de Montréal  
Montreal Neurological Institute and Hospital**

3801, rue Université  
Montréal, Québec H3A 1A1  
☎ (514) 398-1914 FAX: (514) 398-5825



**Service de Neuropathologie – Department of Neuropathology**

**Location:** N04S 464 P

**Physician:** Dr. Del Maestro, Rolando

**Patient Name:** BANAT, MOHAMMED

**Other Name:** "  
**MRN:** RVH\_1566145  
**DOB:** 1978-Jan-27 **Age:** 31 years Male  
**RAMQ:**

**ADDENDUM REPORT**

Reported: 2009-Mar-05 16:11

Case No: NP-09-00

**Addendum Findings**

Methylation status for MGMT promoter gene was assessed by MSPs (methylation specific PCR). The DNA was extracted from the tissue used for the frozen section.

The MGMT promoter gene is methylated.

Ref: N Engl J Med. 2005 Mar 10;352(10):997-1003 and Laboratory investigation 2007, 87(4):392.

The use of this test in guiding therapy has limitations. Review of the relevant literature and clinical correlation is advised.

Electronically signed on 05-MAR-2009  
By Marie-Christine Guiot, MD

**NEUROPATHOLOGY REPORT**

Received: 2009-Feb-19 12:04

Reported: 2009-Mar-02 15:12

Case No: NP-09-00

**Clinical Diagnosis and History**

The patient is a 30 year old male who had seizures and on MRI a left temporal lesion, non-enhancing is noted.

**Intraoperative Consultation**

Glioma, low-grade.

**Macroscopic Description**

Specimen is received in 4 parts.

Part 1 is labeled "frozen section". Frozen section is kept at -80 for further clinical tests. Remainder of the frozen section consists of a light tan fragment measuring 0.5 x 0.3 x 0.2 cm. Submitted in toto in cassette 1A.

Part 2 is labeled "tumor". Specimen consists of a fragment of recognizable cortex, measuring 3.0 x 3.0 x 0.5 cm. Specimen is serially cut and submitted in toto in cassette 2A to 2E.

Part 3 is labeled "infiltrated matter?". Specimen consists of a fragment of white matter measuring 1.5 x 0.8 x 0.5 cm. Submitted in toto in cassette 3A.

Part 4 is labeled "Sonopet bag". Specimen is filtered and approximately 4.0 ml of small tissue fragments and blood clot are recovered. Submitted in toto in cassette 4A to 4D.

MG /CH



**NEUROPATHOLOGY REPORT**

Received: 2009-Feb-19 12:04  
Reported: 2009-Mar-02 15:12

Case No: NP-

**Microscopic Description**

Section 1A shows the presence of glial tumoral proliferation of moderate to moderately high cellularity, background is definitely fibrillary and most of the cells have round to more angular nuclei. There is a definite of nuclear pleomorphism with the presence of a few hyperchromatic larger angular nuclei. No definite mitoses are identified. The presence of a number of small densely hyperchromatic nuclei suggestive of apoptotic nuclei noted. Immunohistochemistry for GFAP is positive in tumoral cells. The proliferation index as estimated by MIB-1, around 4 to 5%. Immunohistochemistry for P53 is negative.

Sections 2A to 2E shows the presence of dense vacuolization secondary to fixation artefacts. However, throughout all the sections, there is a diffuse infiltration by atypical glial cells. The cellularity remains low, no mitoses are found and a few apoptotic nuclei are noted.

Section 3A has a comparable appearance as the sections described above in specimen 2.

Sections 4A to 4D show the presence of a glial tumoral proliferation of moderate cellularity. Most of the proliferation shows fibrillary background and the nuclei are slightly angular or more round. There is some degree of nuclear pleomorphism and mitotic figures are rare. In this section a few areas show a more oligodendroglial pattern with cells with rounded nuclei and perinuclear halo-like features. However, these fragments of tissue were resected from the CUSA bag and this appearance might be artefactual.

Throughout all the sections examined there is no microvascular proliferation. There is no necrosis.

**Final Diagnosis**

BRAIN, LEFT TEMPORAL LOBE, RESECTION:  
- ASTROCYTOMA, WHO GRADE II. (see comment)

code 1.

Electronically signed on 02-MAR-2009  
By Marie-Christine Guiot, MD

**Comment**

On section 1A, the tumor shows an increase cellularity with some definite nuclear pleomorphism. On sections 2A to 4D, a few areas suggestive of oligodendroglial differentiation are seen, however, these areas represent only a small percentage of the tumoral proliferation.





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**Service de Neuropathologie – Department of Neuropathology**

**Dr. Del Maestro, Rolando**  
Royal Victoria Hospital  
N04S

**Patient Name: BANAT, MOHAMMED**

**Other Name:** "

**MRN:** RVH\_1566145

**Referring MRN:**

**DOB:** 1978-Jan-27 **Age:** 31 years **Male**

Copy to:

**RAMQ:**

**Telephone:** (096) 277-7339

**NEUROPATHOLOGY REPORT**

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Reprint date: 2009-03-03 13:40  
NP\_Manual Chart Request-Addendum  
Chart Report: 7759441

Dr. John Richardson  
Dr. Marie-Christine Guiot

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