

Successful Cesarean Delivery in a Pregnant Woman with Anaplastic Oligodendroglioma

MD, PhD Ani Gasparyan^{1,2}, MD, PhD Andranik Poghosyan¹, MD Tigran Sargsyan^{1,3}, MD, PhD Norayr N. Ghukasyan¹, Resident Haykanush Khachaturyan¹
¹Erebouni MC,, Yerevan, Armenia. ²YSMU, Yerevan, Armenia. ³Hrazdan Hospital, Hrazdan, Armenia

RCOG World Congress
2025

Equity in care, innovation in action
23-25 June 2025 | ExCeL London



Objective

To highlight the challenges of managing pregnancy in a patient with anaplastic oligodendroglioma, a rare central nervous system tumor, emphasizing the coordination of neurosurgical, obstetric, and oncologic care to ensure favorable maternal and neonatal outcomes.

Discussion

This case underscores the multidisciplinary management of rare CNS tumors during pregnancy, balancing maternal and fetal risks. Anaplastic oligodendroglioma, while slow-growing, poses challenges due to its recurrence risk and associated seizures. Pregnancy in such patients requires careful coordination to monitor tumor progression and optimize neurological and obstetric outcomes. The use of non-teratogenic antiepileptics and avoidance of imaging during pregnancy contributed to the favorable outcome in this case. Early neurosurgical intervention, as performed in this patient, is critical for tumor control and symptom management.

Conclusions

This case demonstrates that with meticulous multidisciplinary care, patients with malignant brain tumors can achieve positive pregnancy outcomes. Further research is needed to develop standardized guidelines for managing gliomas during pregnancy, addressing the timing of interventions and the impact of various therapies on maternal and fetal health.

Case Report

A 29-year-old woman with a history of anaplastic oligodendroglioma (WHO Grade III, IDH1 mutant, 1p/19q co-deletion) in the left frontal lobe presented at 38 weeks and 2 days of gestation for obstetric management. Diagnosed in 2018 following multiple seizures, she underwent two surgical resections, stereotactic radiation therapy, and was maintained on anticonvulsants (lamotrigine and levetiracetam). Her pregnancy was uneventful, with routine antenatal care. Upon admission, baseline investigations, EEG, and imaging showed no significant abnormalities. Considering her advanced gestational age and prior surgical history, a planned cesarean delivery was scheduled. However, emergency surgery was performed due to the onset of labor. A healthy female infant weighing 2980 grams was delivered without complications. Postoperatively, the patient's recovery was uneventful, and she was discharged in stable condition.

Contact information

E-mail: ani.gasparyan@gmail.com
Tel: +37493595959

