



## Interactions between glioma and pregnancy: insight from a 52-case multicenter series

Submitted by Beatrice Guillaumat on Wed, 12/05/2018 - 15:31

**Titre** Interactions between glioma and pregnancy: insight from a 52-case multicenter series

**Type de publication** Article de revue

**Auteur** Peeters, Sophie [1], Pagès, Mélanie [2], Gauchotte, Guillaume [3], Miquel, Catherine [4], Cartalat-Carel, Stéphanie [5], Guillamo, Jean-Sébastien [6], Capelle, Laurent [7], Delattre, Jean-Yves [8], Beauchesne, Patrick [9], Debouverie, Marc [10], Fontaine, Denys [11], Jouanneau, Emmanuel [12], Stecken, Jean [13], Menei, Philippe [14], De Witte, Olivier [15], Colin, Philippe [16], Frappaz, Didier [17], Lesimple, Thierry [18], Bauchet, Luc [19], Lopes, Manuel [20], Bozec, Laurence [21], Moyal, Elisabeth [22], Deroulers, Christophe [23], Varlet, Pascale [24], Zanello, Marc [25], Chretien, Fabrice [26], Oppenheim, Catherine [27], Duffau, Hugues [28], Taillandier, Luc [29], Pallud, Johan [30]

**Editeur** American Association of Neurological Surgeons

**Type** Article scientifique dans une revue à comité de lecture

**Année** 2018

**Langue** Anglais

**Date** Janvier 2018

**Numéro** 1

**Pagination** 3-13

**Volume** 128

**Titre de la revue** Journal of neurosurgery

**ISSN** 1933-0693

Résumé en  
anglais

**OBJECTIVE** The goal of this study was to provide insight into the influence of gliomas on gestational outcomes, the impact of pregnancy on gliomas, and the identification of patients at risk. **METHODS** In this multiinstitutional retrospective study, the authors identified 52 pregnancies in 50 women diagnosed with a glioma. **RESULTS** For gliomas known prior to pregnancy (n = 24), we found the following: 1) An increase in the quantified imaging growth rates occurred during pregnancy in 87% of cases. 2) Clinical deterioration occurred in 38% of cases, with seizures alone resolving after delivery in 57.2% of cases. 3) Oncological treatments were immediately performed after delivery in 25% of cases. For gliomas diagnosed during pregnancy (n = 28), we demonstrated the following: 1) The tumor was discovered during the second and third trimesters in 29% and 54% of cases, respectively, with seizures being the presenting symptom in 68% of cases. 2) The quantified imaging growth rates did not significantly decrease after delivery and before oncological treatment. 3) Clinical deterioration resolved after delivery in 21.4% of cases. 4) Oncological treatments were immediately performed after delivery in 70% of cases. Gliomas with a high grade of malignancy, negative immunoeexpression of alpha-internexin, or positive immunoeexpression for p53 were more likely to be associated with tumor progression during pregnancy. Deliveries were all uneventful (cesarean section in 54.5% of cases and vaginal delivery in 45.5%), and the infants were developmentally normal. **CONCLUSIONS** When a woman harboring a glioma envisions a pregnancy, or when a glioma is discovered in a pregnant patient, the authors suggest informing her and her partner that pregnancy may impact the evolution of the glioma clinically and radiologically. They strongly advise a multidisciplinary approach to management. ■ **CLASSIFICATION OF EVIDENCE** Type of question: association; study design: case series; evidence: Class IV.

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Titre abrégé J. Neurosurg.

Identifiant

(ID) 28298039 [34]

PubMed

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- [16] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=31332>
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- [30] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=31346>
- [31] <http://okina.univ-angers.fr/publications/ua18253>
- [32] <http://dx.doi.org/10.3171/2016.10.JNS16710>
- [33] <https://thejns.org/view/journals/j-neurosurg/128/1/article-p3.xml>
- [34] <http://www.ncbi.nlm.nih.gov/pubmed/28298039?dopt=Abstract>

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