Oculogyric crisis in pregnancy: A case review

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ABSTRACT

Introduction: Oculogyric crisis (OGC) is a form of acute dystonia characterised by sustained dystonic, conjugate, and involuntary deviation of the eyes. Precipitating factors include postencephalitic parkinsonism, neuroleptic agents, metabolic disorders, and focal brain lesions. Metoclopramide is an antiemetic agent which improves gut motility through its antagonistic action on dopamine which has an inhibitory effect on the gut. However, because it disrupts central dopaminergic signalling, metoclopramide may produce rare movement disorders, such as dystonic reaction, oculogyric crisis.

Case Description: A 22-year-old, primigravida presented with persistent blurring of vision since 28 weeks of gestation. MRI brain reported evidence of an enlarged pituitary tumour (15 x 24 x 30 mm) with intrasellar, and suprasellar component and compression of the optic chiasma. Ophthalmology assessment demonstrated bilateral hemianopia. Hyperprolactinemia was present (2,048 ng/mL). She was seen by us at 28 weeks of gestation and was initially managed conservatively without dopamine agonist therapy. Her visual symptoms deteriorated and urgent delivery was recommended to avoid tumour progression. She underwent caesarean section with harvesting of corticosteroids, and delivered a baby boy weighing 1.43 kg. At four weeks postpartum, the patient underwent trans-sphenoidal surgical resection of the prolactinoma that resulted in an improvement of her vision.

Discussion: The available data for dopamine agonist therapy portrayed a safety profile for treatment in pregnancy particularly for cabergoline and bromocriptine. The growth of adenoma with compression to optic chiasma in the case of macroadenoma will lead to significant visual disturbance or loss, as demonstrated in this case. Surgical intervention for macroadenoma may be indicated in symptomatic cases with increased tumour volume. A multi-disciplinary approach in a centre with expert pituitary team is essential. Currently, there is no clear evidence suggesting an association between breastfeeding with an increment of prolactin level and enlargement of pituitary tumour.

Pituitary adenoma in pregnancy with progression of visual disturbance

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ABSTRACT

Introduction: The diagnosis of pituitary adenoma in pregnancy is rare, with prolactinoma being the commonest type. We report a case of a progressive pituitary tumour in pregnancy that required surgical intervention.

Case Description: A 24-year-old, primigravida presented with persistent blurring of vision since 20 weeks of gestation. MRI brain reported evidence of an enlarged pituitary tumour (15 x 24 x 30 mm) with intrasellar, and suprasellar component and compression of the optic chiasma. Ophthalmology assessment demonstrated bilateral hemianopia. Hyperprolactinemia was present (2,048 ng/mL). She was seen by us at 28 weeks of gestation and was initially managed conservatively without dopamine agonist therapy. Her visual symptoms deteriorated and urgent delivery was recommended to avoid tumour progression. She underwent caesarean section with harvesting of corticosteroids, and delivered a baby boy weighing 1.43 kg. At four weeks postpartum, the patient underwent trans-sphenoidal surgical resection of the prolactinoma that resulted in an improvement of her vision.

Discussion: The available data for dopamine agonist therapy portrayed a safety profile for treatment in pregnancy particularly for cabergoline and bromocriptine. The growth of adenoma with compression to optic chiasma in the case of macroadenoma will lead to significant visual disturbance or loss, as demonstrated in this case. Surgical intervention for macroadenoma may be indicated in symptomatic cases with increased tumour volume. A multi-disciplinary approach in a centre with expert pituitary team is essential. Currently, there is no clear evidence suggesting an association between breastfeeding with an increment of prolactin level and enlargement of pituitary tumour.