Ophthalmic pathology in the offspring of pregnant women with gestational diabetes mellitus

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Introduction: Gestational diabetes mellitus (GDM) develops in 1-3% of pregnancies. GDM is associated with adverse health outcomes for both mother and newborns. Regarding, children born from a GDM pregnancy, there is association to disturbances of intrauterine growth, congenital anomalies (cardiovascular congenital abnormalities, isolated renal a/dysgenesis, obstructive defects of the urinary tracts, cryptorchidism, shoulder dystocia, esophageal atresia) as well as post-natal neurobehavioral disorders. But after a search through PubMed, we only found one work on how GDM could affect the eyes of these children. Ricci et al., describe changes in the iris vessels and stroma that resolved spontaneously within 2 weeks.

Methods: We conducted an observational study among children who attended the outpatients ophthalmology clinic in our hospital from January 2011 to December 2015. We divided the study patients into three groups: A (GDM controlled with diet), B (GDM controlled with insulin), C (control, no GDM). We review the notes collecting information on refraction, ophthalmologic pathology and/or congenital ocular malformations.

Results: We have collected data from 356 children. Results show similar rates in strabismus among the three groups. But there seems to be an increase in the rate of amblyopia, especially due to anisometropia, in those children born to a GDM mother compared to control group.

Conclusion: These results would show a need to refer children born to GDM pregnancies to the ophthalmology department as ametropia and amblyopia can interfere in normal acquisition of fine skills as well as academic achievements and can also easily be treated and corrected if detected.

Biography

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