

Vitamin deficiency after weight loss surgery can cause vision loss in newborns

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Biliopancreatic diversion surgery for morbid obesity is known to cause multiple vitamin deficiencies that may worsen during pregnancy. In the June issue of the *Journal of AAPOS*, the Official Publication of the American Association for Pediatric Ophthalmology and Strabismus, a group of Australian clinicians report a child who was born blind as a result of Vitamin A deficiency caused by his mother's obesity surgery.

Clinical investigators from Australia documented the case of a woman who had undergone biliopancreatic diversion surgery for obesity 7 years before the birth of her child. At 9 weeks gestation, the mother was diagnosed with severe deficiencies of Vitamins A, D and K, as well as iron-deficiency anemia, which had been undetected prior to this point. Despite treatment, her serum [vitamin A](#) level remained critically low throughout the pregnancy. Her infant son had significant malformations of both eyes, and his vision remains poor despite treatment. For the fetus, the first 8 weeks of gestation are the most critical time for organs to develop, including the formation of the visual system,

Lead investigator Glen Gole, MD, FRANZCO, Department of Ophthalmology, Royal Children's Hospital and Discipline of Paediatrics and Child Health, University of Queensland, Brisbane, states, "The mother's description of night blindness, recurrent low vitamin A levels during the pregnancy, and demonstrated vitamin A deficiency in the neonate support [vitamin A deficiency](#) as the cause. This case illustrates that vitamin A is very important for normal eye development in the fetus, particularly for pregnant women who have undergone gastric

bypass surgery in order to improve their fertility."

Commenting on the article, J AAPOS Editor-in-Chief David G. Hunter, MD, PhD, stated, "Weight-reduction surgery is becoming more common, especially with the potential for health benefits that result from reducing obesity. Unfortunately some forms of this surgery cause vitamin deficiency, and in this case the problem led to a birth defect that caused blindness in one child. We are not aware of any other cases of this particular problem, but it is important for any woman who has had this form of gastric bypass [surgery](#) to be checked for vitamin deficiency--and have it corrected—before considering having a baby."

More information: The article is "Ocular malformation in a newborn secondary to maternal hypovitaminosis A" by Hannah Gilchrist, MBBS, Deepa A. Taranath, MS, FRANZCO, and Glen A. Gole, MD, FRANZCO. It appears in the Journal of AAPOS, Volume 14, Issue 3, (June 2010) published by Elsevier. [doi:10.1016/j.jaapos.2010.01.015](https://doi.org/10.1016/j.jaapos.2010.01.015)

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