Traumatic cataract and retina detachment after home delivery: a case study

Cataracte traumatique et décollement de rétine après accouchement à domicile : à propos d’un cas

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Abstract
Introduction: Indirect causes of maternal death include trauma. The present study is reported a case of traumatic cataract after the home birth of a child received in consultation 3 months after her birth.
Clinical case: It was a 3-month-old female baby, 2nd of a uterine sibling of two children, brought to the ophthalmology department of the Souro Sanou University Hospital of Bobo Dioulasso on June 18, 2018 and in whom a decrease in visual acuity and leucocoria was observed. During the interview, the mother claimed that she gave birth at home without the help of a third person and that the baby would have fallen on her face. The slit lamp examination found a dislocated cataract in the anterior chamber and a retinal detachment confirmed on ultrasound. The observation made revealed the circumstances of the occurrence, the signs of appeal, the clinical and paraclinical signs, and data related to the treatment.
Cataract surgery under general anaesthesia has been performed. The child is always followed up in consultation.
Conclusion: Having a very reserved prognosis, traumatic cataracts represents a frequent complication of eye trauma in children, including amblyopia, hence the need to inform and sensitize parents about the risks associated with home delivery.
Keywords: traumatic cataract, home delivery, child under 5 years of age, Bobo Dioulasso.

Résumé
Introduction : Parmi les causes indirectes de décès maternels, il y a les traumatismes. Il est rapporté un cas de cataracte traumatique après accouchement à domicile d’un enfant, vu 3 mois après la naissance.
Cas Clinique : Il s’agissait d’un bébé de 3 mois, de sexe féminin, 2ème d’une fratrie utérine de deux enfants, amené en consultation au service d’ophtalmologie du Centre Hospitalier Universitaire Souro Sanou de Bobo Dioulasso le 18 juin 2018, et chez qui il a été constaté une baisse d’acuité visuelle et une leucocorie. À l’interrogatoire, la maman a affirmé avoir accouché à domicile sans l’aide d’une tierce personne et que le bébé serait tombé sur la face. L’examen à la lampe à fente a retrouvé une cataracte luxée dans la chambre antérieure et un décollement rétinien confirmé...
We report the case of a young girl who suffered an eye trauma during a home birth.

**Clinical case**

Using a case study design, our case was seen in the ophthalmology department of the National teaching hospital Soro Sanou University Hospital (NTHSS) in Bobo Dioulasso, Burkina Faso on June 18, 2018. The observation made revealed the circumstances of the occurrence, the signs of appeal, the clinical and paraclinical signs, and data related to the treatment. Related to the circumstances of occurrence and signs of appeal, the present case was the child named AC, a 3-month-old female baby, second of a uterine sibling of two children who consulted the ophthalmology department of Bobo Dioulasso’s Soro Sanou University Hospital Centre for visual acuity and leucocoria noted by the parents. During the interview, the mother claimed that she gave birth at home without the help of a third person and that the baby would have fallen on her face. She had only had one prenatal consultation (ANC). The mother only performed tetanus vaccination during the pregnancy of the child named AC.

About the clinical and paraclinical signs, the visual acuity was not quantified but a positive photomotor reflex was noted. The examination of the appendices revealed converging strabismus and signs of amblyopia. Upon examination of the anterior segment, a clear cornea, a good anterior chamber with a dislocated cataract, was found. The examination of the posterior segment was difficult because of the opacification of the lens. On ultrasound examination, a retinal detachment was diagnosed.

Concerning the treatment, the cataract surgery under general anesthesia has been performed. The patient is always being followed up in the department. Unfortunately, the evolution is towards a phthisis of the eyeball in this little girl under one-year-old.
Discussion

In children, eye trauma is a major cause of morbidity and the leading cause of non-congenital monocular blindness [5-7]. The trauma can occur during the delivery or after the childbirth. Improving maternal and child health remains a public health problem for developing countries [8]. To this end, birth monitoring is a major component of the concept of «reproductive health» [8]. Despite many health facilities in the city of Bobo Dioulasso (Region of Hauts Bassins), 13.1% of women continue to give birth at home without medical [9], jeopardizing their children’s vital and visual prognosis.

In Burkina Faso, 81.60% of women who give birth at home were out of school [2], Women without income-generating activities commonly referred to as housewives are mostly dependent on their spouses or the parents with whom they live. Also the absence of the spouse or the inability of the spouse to meet health expenses limits women’s access to health centres [10]. This was the context of the mother in this case.

The mother of the child named AC was at her second birth. Studies have shown that there is a link between the parity and the place of delivery [8]. In Guinea, it was the large parturient women who gave birth most at home (48.67%) according to Diallo et al [11]. This could be explained by the fact that these women thought that, having had experience of childbirth, they could do without maternity services. While according to midwife Isabelle Brabant (2014), «Not everything is in books. Every birth is a school. Every woman is a master».

Also, the mother of the AC child only had one prenatal consultation (ANC). The importance of ANCs is still not perceived by pregnant women who very often present themselves late at the 1st ANC (end of the 2nd quarter) or do not respect the deadlines set for the next consultations [8]. The fewer the number of ANCs performed by the woman, the greater the risk of her giving birth at home [8].

The quality of care in the health services pushes some women to give birth at home. There is 3 times more risk for the woman to give birth at home if she is convinced that she will not be cared for in the maternity ward [8]. The misuse of certain medical practices such as episiotomy and the untimely prescription of caesarean sections testify to the incompetence of midwives to perform vaginal delivery [8].

Nowadays in Burkina Faso, with the effort made by our decision-makers to offer free care to pregnant women and children under 5 years of age [12], financial accessibility is no longer a factor that can facilitate the decision to give birth at home.

The risk of a woman for giving birth at home decreases as she becomes more open to modernity
A frequent pathology, most often unilateral, contusive or perforating, traumatic cataract is an opacification of the lens that can often occur as early as 6 hours after a trauma. In this case study, contusive cataract was associated with retinal detachment. Difficult management usually requires a double skill in emergency surgery of the anterior and also the posterior segment [13].

As the first case of its kind in the department, a major difficulty in taking charge of the case emerged because it was seen late, i.e. 3 months after the home birth. In such cases, the visual prognosis depends on the nature of the associated lesions on the one hand and on complications including amblyopia [14]. With the unfortunate evolution towards a phthisis of the eyeball in this little girl under one year old (figure 1), it is obvious that he has developed a binocular vision handicap affecting his quality of life (figure 2).

**Conclusion**

Traumatic cataracts are a very reserved prognosis and represent a frequent complication of eye trauma in children, especially when associated with retinal detachment, leading to bulbar phthisis. This reminds us of the need to inform and raise awareness among parents about the risks associated with home childbirth. Hence the importance of prevention, particularly through awareness-raising campaigns on the importance of quality prenatal consultations.

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