*Newborn Medications: Vitamin K and Erythromycin*

In the first hours after birth, Vitamin K and Erythromycin eye ointment are routinely given to all newborns under medical care. Both of these medications will be offered to your baby, but we will always respect your right to choose what is best for her or him.

**Vitamin K**

In humans, Vitamin K is produced primarily by bacteria in the bowel. Babies are born naturally deficient in Vitamin K as only a small amount is transferred across the placenta in utero and the baby’s bowel is sterile at birth (i.e. has no bacteria).

There are only small amounts of Vitamin K in breast milk. Vitamin K is essential in blood clotting.

Vitamin K is administered by intramuscular injection (IM) to the thigh of newborns, as it is effective in preventing a rare, put potentially life-threatening, condition called Vitamin K Deficiency Bleeding (VKDB). There are three types of VKDB: early, classical and late. Early VKDB occurs within the first 24 hours after birth, classical occurs within the first 7 days after birth and late typically occurs 2-12 weeks after birth, but can occur up to 6 months of age. Without Vitamin K supplementation, the incidence of early and classical VKDB is thought to be between 1 in 60 to 1 in 250 infants. The incidence of late VKDB is 1 in 14 000 to 1 in 25 000 infants. Infants who do not receive a vitamin K shot at birth are 81 times more likely to develop late VKDB than infants who do receive a vitamin K shot at birth. The Vitamin K injection is thought to reduce the overall incidence of VKDB to 1 in 1 million. Over 50 years of administering Vitamin K in the early hours of life has not identified adverse effects related to this medication.

For additional information on Vitamin K in newborns, please visit these excellent websites:

 <https://evidencebasedbirth.com/evidence-for-the-vitamin-k-shot-in-newborns/>

<https://www.cdc.gov/ncbddd/vitamink/facts.html>

**Erythromycin**

This clear antibiotic ointment is administered once into each eye. It does not sting; it may cloud the baby’s vision for a brief period. Erythromycin is somewhat effective against chlamydia and gonorrhoea. These are two bacteria that may be present in your baby’s eyes after passage through the vagina if you are infected with these bacteria. Both organisms may lead to blindness if symptoms of eye infection are ignored in the newborn period. It is a public health law that all babies receive this medication.

**AOM Position Statement: Informed Choice and Neonatal Eye Prophylaxis**

November 2012

The Association of Ontario Midwives (AOM) supports the provision of informed choice by midwives in all aspects of care, including the administration of neonatal eye prophylaxis. Parents should have the right to decline neonatal eye prophylaxis for their newborns.

# Background

Neonatal eye prophylaxis was introduced in the 1800s prior to the development of screening and treatment for gonorrhea and chlamydia. At the time, the practice of putting silver nitrate drops in the eyes of newborns greatly reduced the incidence of blindness as a complication of ophthalmia neonatorum caused by the transmission of gonorrhea and/or chlamydia from the mother at birth.1 Current practice in Ontario is for the mandatory administration of erythromycin ointment as a prophylactic agent into the eyes of all newborns to reduce the risk of blindness.

# The Midwifery Context

Midwives are committed to providing evidence-based care to their clients. With the advent of laboratory testing and antibiotics to treat chlamydia and gonorrhea, the risk of these infections being transmitted from mother to child at the time of birth is very low. Over the course of prenatal care, midwives offer testing and arrange treatment for infectious diseases such as gonorrhea and chlamydia. Midwives also provide frequent follow-up care to newborns in the postpartum period until six weeks of age. The risk of complications leading to blindness should a newborn develop ophthalmia neonatorum are also very low when there is adequate postpartum follow-up and access to care. 2 Contrary to current public health policy, research evidence does not support mandatory neonatal eye prophylaxis since the agents used for eye prophylaxis show high rates of ineffectiveness.3 For this reason, along with low rates of maternal chlamydial and gonorrheal infection, a number of countries around the world and provinces within Canada have abandoned mandatory eye prophylaxis.2,4

# The Legislation

Respect for autonomy is a fundamental principle in health care ethics. In Ontario, the Health Care Consent Act5 aims to foster informed consent and protects the decision-making authority of patients and their substitute decision-maker. In contrast to this broadly accepted approach to autonomous decisionmaking, the requirement for the mandatory administration of a prophylactic agent into the eyes of all newborns is enshrined in the Health Protection and Promotion Act.6 This act requires all health care professionals in Ontario attending a birth to ensure that eye prophylaxis is administered. This law thus requires midwives to administer eye prophylaxis to all newborns in their care. The Health Protection and Promotion Act specifies that the Health Care Consent Act does not apply to the prevention or treatment of communicable diseases of the eyes of the newborn. This exemption means that parents do not have the right to consent to or refuse the administration of neonatal eye prophylaxis as they do all other procedures or treatments for their child, despite the limited evidence of the effectiveness of treatment. The Ontario model of midwifery practice is grounded in the provision of informed choice, which is inherent in the ethical principle of respect for autonomy. In all aspects of care, midwives aim to empower women to make the best decisions for themselves and their families with regards to their care. The Health Care Consent Act supports the principle of autonomy by recognizing parents as the most appropriate substitute decision-makers for their child and entrusts parents to make significant decisions in their child’s best interests. State intervention in parental decision-making authority is only warranted in cases where it is clear that the parent’s choice places the child at significant risk of serious harm.7 Excluding neonatal eye prophylaxis from the provisions enshrined in the Health Care Consent Act is a disproportionate response and interferes with the exercise of parent’s autonomy vis-à-vis decision-making in the best interests of their child.

# Consequences

Lack of a clear and legal process for opting out of neonatal eye prophylaxis affects both midwifery clients and midwives when parents refuse eye prophylaxis for their baby. Some parents who have refused eye prophylaxis for their newborns have been subject to the scrutiny of public health and child protection agencies. This is not only traumatic for new parents, it is also an inappropriate and unwarranted use of resources. This situation also negatively impacts midwives’ interprofessional relations and creates unnecessary tension between midwives and the law and the College of Midwives of Ontario. Legislated neonatal eye prophylaxis may also impact the ability of hospitals to provide evidence-based care and patient-centred care and thus impede their compliance with the Excellent Care for All Act.

# Conclusion

Based on the current clinical context and the ethical principle of respect for autonomy and recognizing that parents make decisions in the best interests of their children, the AOM does not believe that there is reasonable evidence for the administration of eye prophylaxis to be exempt from the Health Care Consent Act. Changes to the legislation are warranted to enable midwives to provide evidence-based care and informed choice in this matter, and to enable parents to exercise their autonomy by allowing them the right to decline eye prophylaxis for their newborn if they choose to do so.

**References**

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