

## Eye Care and Prevention of Ophthalmia Neonatorum

Partly adapted from Pomegranate Midwives

*To prevent eye infection in the newborn, primarily from Gonorrhea or Chlamydia infection but also other bacterial infections. In Canada, it is standard practice to give prophylactic treatment to the newborn's eyes with an antibiotic ointment. The antibiotic most commonly used is erythromycin.*

### **What causes newborn eye infection?**

Gonorrhea and Chlamydia are both sexually transmitted infections (STIs), which if present in the vagina at birth can pass to the newborn and infect the eyes. Although both STIs are often tested in pregnancy, no test is 100% reliable and these infections may be asymptomatic in the pregnant person and the baby. There is also a risk of acquiring the infection after the screening test is done in early pregnancy. When undiagnosed and untreated such eye infections can cause blindness or systemic symptoms.

### **How can newborn eye infection be prevented?**

*Erythromycin*, 0.5% antibiotic ointment is administered to the baby's eyes within two hours of birth. The ointment is similar in texture to petroleum jelly. It is squeezed from a tube directly into the baby's eyes following birth. The British Columbia Health Act of 1995 states that all babies must be treated as a preventative measure (prophylactically).

### **What are the benefits to the use of erythromycin eye ointment?**

The use of topical antibiotic eye ointment greatly reduces the risk of bacteria colonizing the eye and causing an infection. Although the primary bacterial infection is related to Chlamydia and Gonorrhea, other bacterial infections can also be prevented.

### **What are the risks associated with the use of erythromycin eye ointment?**

There is no method of treatment that is 100% effective in preventing infection. According to the American Centre for Disease Control, after antibiotic prophylaxis 15-25% of infants exposed to Chlamydia will still develop conjunctivitis (eye infection or irritation). Administration of the ointment is painless; however, in some cases the treatment itself causes an irritation of the eyelids, also known as chemical conjunctivitis, which may create a route of entry for various infections.

Treatment will cause blurred vision for a few hours after being given. Because of this, some parents are concerned that the ointment may interfere with bonding by blurring vision or causing the baby to become fussy. To minimize any negative side effects, it is possible to delay application for the first hour of life, giving mom and baby time to bond and have their first feed. If the medication is given just before your baby falls asleep, the majority of it will be absorbed by the time your baby wakes up again.

Another concern is exposure to antibiotics, which can cause system imbalance: antibiotic-resistant, infection-causing bacteria continue to grow, while other normal and healthful bacteria are killed. Because of the minimal amount of antibiotics in this treatment, this is not considered a large concern and has not been described in the literature.

### **What if I know I don't have an STI?**

You were probably tested for Chlamydia and Gonorrhea earlier in your pregnancy. (Check with your caregiver.) If you are confident that you have not acquired either of these infections since then (assuming the results were negative or you received treatment), you may decide not to give any eye medication. This includes being absolutely confident that your sexual partner(s) do not have these diseases, which they may have passed on to you. Since both of these diseases can be “silent”, do not rely on being symptom-free as a sign that you or your partner(s) do not have an infection.

However, tests for Gonorrhea and Chlamydia are only accurate 85% of the time.

If you know, or strongly suspect, that you have Gonorrhea, your baby will need more than just this treatment. Both you and baby need to be treated with IV antibiotics.

### **Are there any alternative treatments?**

Some people will express breastmilk and apply this to their baby's eyes. We know that breastmilk is full of antiviral, antibacterial and healing properties, but it has never actually been proven effective in preventing eye infections due to Chlamydia or Gonorrhea.

### **What do I do if I suspect infection in my baby?**

Please note that some redness and swelling on your baby's eyes is normal, especially in the first few days. Whether your baby had treatment or not, if you suspect infection, report this immediately to your caregiver. Cultures can be taken to determine which organism is responsible and appropriate treatment given.

### **Key Points**

- When there is an increased risk of infection through the parent, treatment should be administered immediately after birth
- Erythromycin eye ointment is normally administered during the newborn exam within the first hours postpartum
- The erythromycin eye ointment is considered to be painless. However, it may blur the baby's vision temporarily and is therefore timed not to interrupt the close bonding time that occurs immediately after birth
- If parents decline to have the erythromycin eye ointment administered after considering the risks and benefits, an Informed Refusal should be signed
- It is important to watch the baby's eyes for redness, discharge and swelling

## Informed Choice of Prevention of Ophthalmia Neonatorum

I/we have read all of the information on the previous page and have had the opportunity to ask questions regarding the treatment options for my baby for eye care and prevention. I/we understand the risks and benefits of treatment as outlined. My/our choice for treatment is initialed below.

\_\_\_\_\_ I elect to have the erythromycin eye ointment administered by the care provider

\_\_\_\_\_ I decline to have the erythromycin eye ointment administered by the care provider

\_\_\_\_\_  
Client (Name)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Partner (Name)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date