

**Presenter:** Danita Curtis, NP

**Topic:** *Chlamydia trachomatis*

**Why this case is of interest:** It raises the question of innocent transfer between siblings.

**Case summary:**

4 year-old female (index child) with positive chlamydia

Child had been visiting father from 5/12 – about 8/20/12.

8/23/12: She was reported to have disclosed to her mother that her father had touched her vaginal area.

8/27/12: She was taken to local clinic for URI & vaginal itching and reported disclosure to mother that father touched her.

8/28/12: Evaluated for abuse by CHAMP Provider; erythema, otherwise normal exam; urine sent for NAAT.

8/31/12: Positive NAAT for chlamydia.

9/4/12: Follow-up evaluation and cultures obtained; increased erythema; # 2 NAAT collected; ProbeTec swab externally over urethra.

9/7/12: Lab results:

1. #2 NAAT positive for chlamydia
2. Positive culture for *Chlamydia trachomatis*

9/7/12: Treated with azithromycin 1 gram.

10/5/12: NAAT is negative for chlamydia.

7 year-old sister

Child lives with grandmother (by report of CPS, visits sister's very often).

9/17/12: In clinic for c/o nasal congestion and sore throat; dx with URI.

9/28/12: In clinic with eye drainage; dx with conjunctivitis. Treated with gentak 0.3%, TID for 7 days.

10/9/12: Appointment for abuse exam was a no-show.

10/10/12: In clinic for eye drainage, not improving, and CPS requested NAAT. Diagnosed with conjunctivitis; treated with erythromycin ophthalmic ointment, TID for 7 days.

10/14/12: Labs results:

1. Negative culture of eye drainage (gram stain)
2. Positive urine NAAT

10/15/12: Cancelled exam one hour prior to appointment.

10/22/12: Abuse exam by CHAMP Provider; genital exam without findings; eyes are red, tearing without purulent drainage; urine for NAAT repeated; ProbeTec swab externally over urethra.

10/25/12: Labs results:

1. Positive NAAT (Aptima- *Chlamydia trachomatis* Rna Tma)
2. Positive ProbeTec culture (Dna sda *Chlamydia trachomatis*)
3. Negative viral culture of eye drainage

10/25/12: Treated with azithromycin 1 gram.

2 year-old sister

Child lives with 4 year-old sister. (She did not have visitation with father when her 4 year-old sister went.)

9/4/12: To clinic for eye drainage; dx with conjunctivitis. Script given for trimethoprim sulfate/polymix, OU QID for 10 days.

9/7/12: To clinic with worsening eye drainage; gentak 0.3% ointment started.

9/17/12: To clinic with ear pain and persisting eye drainage; diagnosed with AOM and conjunctivitis. Treated with cefdinir 125/5ml one tsp PO BID for 10 days and levofloxacin 0.5% one drop OU TID for 7 days.

10/22/12: Exam for abuse; genital exam is without findings; ProbeTec culture obtained by swabbing externally over urethra; unable to obtain NAAT; viral culture of tears.

10/27/12: Lab results:

1. Positive ProbeTec culture (Dna sda *Chlamydia trachomatis*)
2. Negative viral culture of eye drainage

10/27/12: Treated with azithromycin 1 gram, based on 2009 Red Book. (2012 Red Book indicates ethylsuccinate 50mg/kg/day QID for 14 days.)

### **Key learning points:**

- We should screen all siblings when one child in the family tests positive for an STD.
- Infection is not known to be communicated among infants and children (Red Book).
- There is limited research available to support the transmission through close non-sexual contact between individuals and fomites. Chlamydia is an obligate intracellular organism and does not survive on inanimate surfaces. The incubation period is approximately one week.

### **Summary of literature:**

American Academy of Pediatrics Committee on Infectious Disease. *Red Book: 2012 Report of the Committee on Infectious Disease*, 29th Edition.

Kaplan R, Adams JA, Starling SP, Giardino AP. *Medical Response to Child Sexual Abuse: A Resource for Clinicians and Other Professionals*. St. Louis, MO: STM Learning; 2011.