Conjunctivitis Outbreak

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STATUS REPORT

Since November 2014, several cases of conjunctivitis have been reported in certain communities of the Ungava coast. Such outbreaks were also reported last year on the Hudson coast.

The information gathered to date indicates infections with adenovirus, the virus most often behind outbreaks. Laboratory tests will be performed to confirm the pathogen.

REMEMBER ON ADENOVIRUS CONJUNCTIVITIS

Keratoconjunctivitis (KCV) is an acute, infectious and highly contagious eye disease caused by human adenoviruses. Many outbreaks reported in the literature are related to transmission during health care combined with community transmission.

The incubation period is normally from 2 to 12 days (with an average of 7 days). KCV occurs abruptly with a unilateral eye infection, with the other eye following two or three days later. The most frequent clinical symptoms are inflammation of the conjunctiva, edema of the eyelids, eye pain, light sensitivity and troubled vision. Corneal infection is also often observed. At the onset of symptoms, the presence of preauricular adenopathy is considered atypical. Although the disease is considered benign, severe complications (membranes or pseudomembranes, hemorrhaging, conjunctival scarring, symblepharon and chronic epithelial keratitis) may occur. Infection lasts from 7 to 21 days and normally resolves without treatment.

The contagious period is from a number of days before the onset of symptoms to 14 days after onset, including the second eye. Transmission occurs through direct contact with infected ocular secretions or through indirect contact with contaminated surfaces, instruments, hands or eye drops. The virus can survive up to 49 days on paper, fabric and other surfaces. However, the inactivation rate of these viruses is highest during the first week.

RECOMMENDATIONS

Below you will find the applicable recommendations during outbreaks of conjunctivitis and case clusters. Note that measures for basic hygiene and instrument disinfection apply at all times.
COMMUNITY ENVIRONMENTS

1. Exclusion of cases from day-care or school is not necessary.
2. Reinforce hygiene methods, such as hand washing and the cleaning and disinfection of surfaces, including toys.
3. Ensure children do not share the same bedding and do not share towels or washcloths for washing faces.
4. Inform the population of the disease’s situation and the hygiene measures to apply.

HEALTH-CARE ENVIRONMENTS

Applicable Measures in Case of Outbreak or Cluster Cases (Two to Three)

1. Rapidly identify individuals with symptoms compatible with conjunctivitis.
2. Install these individuals in a sector separate from other patients as much as possible.
3. Apply additional precautions (use of gloves, gowns and masks with eye protection such as safety goggles or masks with visors) when examining an individual who is infected or suspected of being infected with adenovirus conjunctivitis in order to prevent transmission through contact or droplets.
4. Disinfect the examination room and the waiting room twice a day, particularly high-touch areas (objects in contact with users’ hands).
5. Follow the three-step Contact Plus disinfection method:
   a) Wash with disinfectant;
   b) Rinse with water;
   c) Wash with freshly prepared (each day) 1:9 bleach solution.

Applicable Measures at All Times

1. Wash hands with soap and water rigorously before and after examining any patient and after removing gloves. (Alcohol-based hand disinfectant is not sufficient to inactivate adenovirus.)
2. Use disposable gloves for any potential contact with eye secretions.
3. Ensure high-level disinfection of instruments that come into direct contact with eyes such as tonometers. Follow the manufacturer’s instructions concerning compatible disinfection products and apply the practices for reprocessing of medical instruments proposed by the CERDEM (see attached file).
4. Low-level disinfection is recommended with the institution’s disinfectant for surfaces and instruments that come into contact with ocular secretions (Oxivir TB).
5. Use individual vials for ophthalmic drops.
6. Dispose of ophthalmic drops and solutions that came into contact or potentially came into contact with ocular secretions.
7. Inform the personnel of the situation and reinforce basic hygiene practices. Ensure that training for personnel assigned to instrument disinfection is up-to-date and that all members wear individual protective equipment (IPE).
HEALTH PERSONNEL INFECTED OR WITH SUSPECTED KCV SYMPTOMS

The context of high turnover among Nunavik health personnel requires nuancing the recommendations of exclusion. Ideally, withdrawal is recommended, particularly for highly symptomatic individuals. However, in situations where an interruption in front-line services is anticipated, adjustments could be made by maintaining individuals with few symptoms at tasks where they are less likely to transmit the disease or by meticulously applying heightened basic practices and additional precautions (including use of masks with eye protection or masks with visors).

Sources

• INSPO. Rapport d’investigation. Éclosion de Kératoconjunctivite virale survenue dans la region de la Côte-Nord (09), Québec. 10 septembre 2014.
• DSP Capitale-Nationale, Info-MADO, 9 décembre 2013.