BACTERIAL INFECTIONS OF THE EYES OF NEWBORNS TRANSMITTED THROUGH THE BIRTH CANAL OF THE MOTHER

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ABSTRACT

The article discusses the main bacterial infections of the eyes of newborns transmitted through the birth canal of the mother. They are gonoblennorrhea and chlamydial conjunctivitis, which cause Neisseria gonorrhoeae and Chlamydia trachomatis (serotypes D-K), respectively. We have conducted a systematic qualitative review of publications on the topic of interest to us. The selection criteria were methodological recommendations that help to critically evaluate publications. Clinical features, criteria of differential diagnosis, methods of laboratory diagnostics, tactics of prevention and treatment of these diseases at the present stage are presented..

Relevance. The birth canal of the mother is the very first source of infection of the newborn. If infections of the genitourinary tract were not detected and cured in time, then the causative agents of these diseases can infect the conjunctiva of the newborn. The main causative agents of bacterial infections of the eyes of newborns transmitted through the birth canal of the mother are Neisseria gonorrhoeae and Chlamydia trachomatis (serotypes D-K), which cause gonoblennorrhea and chlamydial conjunctivitis, respectively. In civilized countries, these diseases are quite rare today, but in underdeveloped regions they are still not inferior to their positions [6].

The purpose of the study. To study clinical features, criteria of differential diagnosis, methods of laboratory diagnostics, tactics of prevention and treatment of gonoblennorrhea and chlamydial conjunctivitis at the present stage.Материалы и методы. We have conducted a systematic qualitative review of publications on the topic of interest to us. The selection criteria were methodological recommendations that help critically evaluate publications [8]. Clinical features, criteria for differential diagnosis, methods of laboratory diagnostics, Conjunctivitis – inflammation of the mucous membrane of the eye, which, in most cases, is caused by an infection or an allergic reaction, are presented [7]. This diagnosis is made by 1/3 of patients with eye diseases, it is very common among both adults and children. But does conjunctivitis occur in newborns and who causes it?

In our country at the beginning of the XX century gonoblennorrhea of newborns was quite common. A mother with gonorrhea can infect a child during childbirth. The causative agent

of gonoblennorrhea – Neisseria gonorrhoeae – is a gram-negative bacterium, diplococcus, having the form of "coffee beans", facultative intracellular parasite, will get into the conjunctival sac when the baby's head passes through the birth canal. In this form of gonococcal conjunctivitis, both eyes become ill, unlike gonoblennorrhea of adults, in whom, in their "classic" form, one eye is usually affected [5].

Currently, gonoblennorrhea of newborns is almost not found due to active nonspecific prevention in the maternity hospital. Prevention of gonococcal conjunctivitis is carried out immediately after the birth of a child. A newborn is instilled on the conjunctiva of the lower eyelid with a 20% solution of sodium sulfacil. The bottle should have a label with a clear inscription "Eye drops" and the date of their preparation, the shelf life is no more than 48 hours. Instill 1 drop of solution alternately on the pulled lower eyelid. After that, the baby's eyelids close and gently rub both eyes. After 2 hours . after birth, 1 drop of 20% sodium sulfacyl solution is re-instilled into the conjunctival sac of both eyes. In many foreign countries, for the prevention of gonococcal eye infection, a 1% solution of silver nitrate is used for instillation, or 0.5% erythromycin or 1% tetracycline ointment. No less important is the prenatal prevention of gonoblennorrhea, which consists in a thorough examination of women during pregnancy, timely detection and treatment of urogenital tract infections in them.

Nevertheless, according to statistics, Neisseria gonorrhoeae is the cause of the development of 15% of all conjunctivitis of newborns. In underdeveloped countries, gonoblennorrhea continues to occupy one of the first places among the causes of blindness in children [4].

Gonoblennorrhea manifests itself by the 2-3 day of the baby's life. The eyelids swell and become bluish-purple. The swelling of the eyelids is so dense that the child cannot open his eyes, you need to make an effort to open the eyelid to examine the newborn's eyes. At the same time, an abundant discharge of the color of "meat slops" flows out of the eyes. The mucous membrane acquires a pronounced scarlet color, bleeds easily at the slightest touch.

With the progression of the disease, the swelling of the eyelids becomes less dense, and the discharge from the eyes becomes purulent. The period of suppuration in gonococcal conjunctivitis lasts 2-3 weeks. Following this, a period of papillary hypertrophy occurs in the development of the disease, which is characterized by a decrease in the amount of pus, a weakening of the severity of edema and conjunctival hyperemia. Papillary growths, follicles and folds appear on the mucous membrane of the eyelids. At the stage of recovery, the conjunctiva gradually assumes its usual appearance [4, 7].

Usually Neisseria gonorrhoeae affects the inner surface of the eyelids and external conjunctivitis is carried out immediately after the birth of a child. A newborn is instilled on the conjunctiva of the lower eyelid with a 20% solution of sodium sulfacil. The bottle should have a label with a clear inscription "Eye drops" and the date of their preparation, the shelf life is no more than 48 hours. Instill 1 drop of solution alternately on the pulled lower eyelid. After that, the baby's eyelids close and gently rub both eyes. 2 hours after birth, 1 drop of 20% sodium sulfacyl solution is re-instilled into the conjunctival sac of both eyes. In many foreign countries, for the prevention of gonococcal eye infection, a 1% solution of silver nitrate is used for instillation, or 0.5% erythromycin or 1% tetracycline ointment is

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