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PREVENTION OF HIV INFECTION AMONG MEDICAL PROFESSIONALS

Yarmuhamedov Nabijon Navro'zovich
Axmedov Alisher Astanovich
Department of Orthopedic Dentistry
Samarkand State Medical University, Samarkand, Uzbekistan

Abstract

This article examines the epidemiological situation with HIV infection in the Uzbekistan, defines regulatory documents for the prevention of HIV infection and the necessary preventive measures among healthcare workers.

Keywords: HIV infection, prevention, occupational infection, medical workers, epidemiology.

Introduction

Relevance. In 2017, 93,000 new HIV infections were officially registered. Thus, the incidence was 63.3 cases per 100,000 population. And today 0.7% of the total population of the Russian Federation is infected with HIV [7]. Chelyabinsk is also included in the list of cities with the highest incidence, where all 63 residents are infected with HIV (1.6% of the city's population). Among the methods of infection, sexual and narcotic are almost equally common (50.3% and 46%, respectively).6.[9.10]. In addition, there is a tendency to increase the number of cases among the elderly population. That is, citizens of this category most often need inpatient treatment and invasive tests and treatment methods. Among other things, less than half (35.5%) of infected people received antiretroviral therapy, due to both objective and subjective reasons. In connection with the above, the risk of occupational infection of medical personnel during the provision of medical care increases. In the period from 2015 to 2017, cases of occupational infection of medical personnel and suspicion of them were recorded in 21 subjects of the Russian Federation, and in 10 months of 2017, 12 cases of suspected HIV infection were registered in the provision of medical care. Therefore, medical professionals should exercise maximum vigilance and recognize patients as potential HIV-infected. In most cases, there are no external signs of the disease, so medical professionals should protect themselves when providing medical care. Surgeons are most susceptible to HIV infection and other parenteral infections. They work with potentially dangerous biological materials:

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blood, lymph, biological fluids containing visible blood impurities. In addition to the surgical profile, the risk of infection is high in such departments as the intensive care unit, neonatal pathology, gynecology, infectious diseases department, blood collection points [12], including blood transfusion departments. In medical institutions, the probability of HIV infection is highest when injuries are caused by contaminated medical equipment, especially hollow medical needles (the probability of infection is about 0.3%, depending on the time that has elapsed after blood has entered the device). If biological substances containing pathogenic microorganisms enter the mucous membranes and damaged skin, the probability of infection is no more than 0.09%. That is why HIV infection among medical workers most often occurs as a result of "emergency situations". In most cases, this is a common inability to work with biological fluids and sharp instruments [11, 13]. According to the data of the state budgetary institution "Regional Center for the Prevention and Control of AIDS and Infectious Diseases" of the Chelyabinsk region, in 2015, of those who applied to the center for the prevention of occupational HIV infection, in 63 cases they were doctors, in more than half of the cases - representatives of the secondary medical staff (10%) of cases and 1-1 (12%) of young medical staff in 4 minutes 1. HIV infection often occurs not only due to a lack of awareness of health workers about safety measures, but also due to the lack or insufficient amount of measures to prevent HIV infection after infection. That's why we need to pay more attention to the issue of prevention. HIV prevention measures among healthcare professionals include specific and non-specific methods [6]. Non-specific ones include: • Epidemiological vigilance in relation to all patients without exception; • Strict observance of the rules of disinfection and use of medical waste; • Use of biological fluids Specific measures to prevent HIV infection in the event of an "emergency" include the use of first aid kits against AIDS and taking antiretroviral drugs. according to standard schemes.Hospitalization should be initiated within the first 2 hours after the occurrence of an emergency. But no later than 72 hours later. The standard prevention regimen after HIV infection: lopinavir / ritonavir 2 tablets 2 times a day + zidovudine / lamivudine 1 tablet 2 times a day. If the medical facility does not have these drugs, start chemoprophylaxis using other antiretroviral drugs such as timazid (zidovudine), epivir (lamivudine), etc. Contact the GBUZ "Regional Center for the Prevention and Control of AIDS and Infectious Diseases" as soon as possible after contact with the biological substance of a person suspected of infection, for medical help in case of an

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emergency. There are many documents regulating the behavior of specialists. All medical staff should be made aware of their situation. The main regulatory documents include: • Sanitary and epidemiological rules SP3.1.5.2826-10 "Prevention of HIV infection" * Sanitary and epidemiological rules and norms of the SanPiN2.1.3.2630-10 "Sanitary and epidemiological requirements for organizations"., Implementation of medical activities" • Sanitary and epidemiological rules SP1.3.2322-08 "Safety of work with microorganisms of the III-IV group of pathogens of pathogenic (dangerous) and parasitic diseases" • Order of the Ministry of Health and Industry of the Russian Federation dated 08/16/1994 No.170 "On measures to ensure safety when working with microorganisms of the III-IV group of pathogens pathogenic (dangerous) and parasitic-parasitic diseases". to improve the prevention and treatment of HIV infection in the Russian Federation" *Methodological recommendations MU3.1.3342-16 "Epidemiological surveillance of HIV infection" According to SP3.1.5.2826, the composition of first aid kits for first aid in case of an emergency is recommended [12]. It must necessarily include: 1. 70% alcohol - 100 ml (treatment of skin and mucous membranes); 2. 5% iodine solution - 1 vial (wound treatment); 3. 5 cotton gauze swabs. (Treatment of skin and mucous membranes); 4. Patches (in the presence of microtrauma); 5. Finger pads - 5 pcs. (In the presence of microtrauma); 6. Scissors. 7. The algorithm of a set of measures for the prevention of HIV infection in the event of an emergency when performing various types of work. 8. Indication of the storage location of ARV drugs and operational control of working days, weekends and holidays in the medical center. 9. If there are no medicines in the medical institution, then provide a list of the nearest medical institutions that are allowed to store ARV drugs. The entire volume of primary medical care for medical workers in emergency situations associated with the risk of HIV infection should be provided in medical institutions at the workplace, that is, in places where there is a possibility of infection. In accordance with the order of the head of the medical institution, it is necessary to identify the responsible person or several people involved in the registration and investigation of emergency situations; they are responsible for the storage of antiretroviral drugs and rapid HIV testing, which should provide round-the-clock access, including weekends and holidays [2, 4]. Any medical professional should be familiar with the order under a personal signature. In addition, it is necessary to undergo training in the prevention of occupational infections. At least 2 times a year, childbirth is required, as

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evidenced by an entry in the journal with instructions at work. In the event of an emergency in the institution, it is necessary to immediately conduct an extraordinary briefing at the workplace for all medical personnel. The necessary list of actions in case of an emergency, according to SP3.1.5.2826-10: 1. As soon as possible after contact, find out who is the potential source of infection, as well as medical personnel who have been in contact with him for HIV and viral hepatitis b and C. HIV testing of people in contact with potential HIV pathogens-infections should be carried out by express diagnosis. An HIV antibody test is performed immediately after an emergency occurs. In addition, it is mandatory to send a sample of the same part of the blood for a standard HIV test using the ELISA method. 3. Medical personnel who have come into contact with serum (or plasma) samples of human blood, which is a potential source of infection, are transferred for storage to the GBUZ "Regional Center for the Prevention and Control of AIDS and Infectious Diseases"4 for a period of 12 months. If HIV is diagnosed at the source of infection, it is necessary to find out whether he has received antiretroviral therapy, and if so, in sufficient quantities. 5. If the injured medical worker is a woman, it is necessary to conduct a pregnancy test and find out if she is breastfeeding a child. 6. If it is impossible to find accurate data, then prevention after infection begins immediately. If additional information is clarified, the scheme will be adjusted

References

1. Marjona T. OPTIMIZATION AND IMPROVEMENT OF CARIES TREATMENT IN THE FIELD OF PERMANENT TEETH FISSURES IN CHILDREN //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 10. – С. 78-84.
2. Ruziyeva K. A., Burhonova Z. K. K. Complex Application Of Magnetic Laser Therapy And Propolis Tincture For The Prevention And Treatment Of Chronic Recurrent Aphthous Stomatitis //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 06. – С. 127-130.
3. Sevinch E., Zarafruz B. ETIOLOGICAL TREATMENT FEATURES INFLAMMATORY PERIODONTAL DISEASE //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 03. – С. 241-246.
4. Zarafruz K. S. B. THE ROLE OF ORAL CAVITY MICROORGANISMS IN THE DEVELOPMENT OF INFLAMMATION AND SOMATIC PATHOLOGY

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//International journal of advanced research in education, technology and management. – 2024. – T. 3. – №. 8. – C. 192-202.

5. Yusufboy S., Qobilovna B. Z. STUDY THE EFFECT OF HYGIENIC CARE ON THE MICROBIAL LANDSCAPE OF THE ORAL CAVITY IN PATIENTS USING COMBINED SPLINTING STRUCTURES WITH MODERATE PERIODONTITIS //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – T. 4. – №. 02. – C. 50-55.
6. Yusufboy S., Qobilovna B. Z. FEATURES OF THE STRUCTURE OF COPD IN ELDERLY PATIENTS //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – T. 4. – №. 05. – C. 363-368.
7. Sevinch E., Qobilovna B. Z. A STUDY ON THE MORPHOFUNCTIONAL STATE OF ORAL ORGAN TISSUES DURING THE USE OF NON-REMOVABLE ORTHODONTIC STRUCTURES //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – T. 4. – №. 03. – C. 247-253.
8. Shaximardonova E. S., Kobilovna B. Z. RED LICHEN PLANUS OF THE ORAL MUCOSA AND ITS CLINICAL ANALYSIS OF A PATIENT WITH, ASSOCIATED WITH THE EPSTEIN—BARR VIRUS //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – T. 4. – №. 01. – C. 272-279.
9. Yusufboy S., Qobilovna B. Z. STUDY OF CHANGES IN THE ORAL CAVITY IN ENDOCRINE DISEASES //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – T. 4. – №. 05. – C. 357-362.
10. Yusufboy S., Qobilovna B. Z. STUDY OF CHANGES IN THE ORAL CAVITY IN ENDOCRINE DISEASES //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – T. 4. – №. 05. – C. 357-362.
11. Yusufboy S., Qobilovna B. Z. SMARTBURS II–A REVIEW OF THE ADVANTAGES OF SMART BOR //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – T. 4. – №. 02. – C. 56-60.
12. Makhmudovna T. M. et al. THE COURSE OF MALFORMATION AND CORNEAL EROSION IN TUBERCULOSIS PATIENTS //Open Access Repository. – 2023. – T. 4. – №. 03. – C. 60-66.
13. Dilafruz K. ROOT CANAL PREPARATION AS A STAGE OF TOOTH RESTORATION //International journal of advanced research in education, technology and management. – 2024. – T. 3. – №. 9. – C. 100-107.

14. Dilafruz K. COMPREHENSIVE TREATMENT GENERALIZED PERIODONTITIS AND CLINICAL AND RADIOLOGICAL EVALUATION OF EFFECTIVENESS //International journal of advanced research in education, technology and management. – 2024. – Т. 3. – №. 9. – С. 108-116.

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