To Analyze the Prevention and Control of Blood-Borne Diseases in Laboratory

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Abstract: Objective: To study the prevention and control measures of blood-borne diseases in laboratory, so as to improve the safety of patients and medical staff and reduce the incidence of nosocomial infection. Methods: To carry out strict safety prevention work for infectious diseases patients who received blood test in our hospital, including 7 cases of syphilis, 13 cases of hepatitis C, 23 cases of hepatitis B virus, 33 cases of hepatitis B, a total of 76 cases of blood-borne diseases patients, close observation and detailed analysis of the prevention and control effect. Results: After medical prevention and disease control was carried out by the laboratory department, the disease in the laboratory department of our hospital achieved good prevention and control effect, no nosocomial infection occurred during the prevention process, and the effective rate of blood-borne disease prevention was up to 100.00%. Conclusion: Strictly implementing the prevention and control measures of blood-borne diseases in the laboratory can effectively control the occurrence of blood-borne diseases and ensure the safety and health of patients and medical staff to the maximum extent.

1. Introduction

Blood transmitted diseases types mainly include syphilis, AIDS, hepatitis c, hepatitis b, etc., including syphilis incubation period about 2 to 4 weeks, hepatitis c and hepatitis b incubation period is 6 months or so more, incubation period of AIDS can be up to 2 to 10 years, and when such patients for blood tests, if accidentally damage, are both could infect medical staff and patients' families, and other patients, etc., will cause serious harm to other people health. Meanwhile, due to the circulation of blood samples containing viruses, such patients are at high risk of blood-borne diseases. Therefore, medical staff should try to reduce or avoid contact with such patients and blood samples to a certain extent during blood testing, so as to reduce occupational exposure to a certain extent. In addition, effective prevention and management control measures for patients should be strengthened to reduce the incidence of nosocomial infection and ensure the safety of patients and medical staff [1]. The purpose of this study is to explore the prevention and control measures of blood-borne diseases in laboratory.

2. Clinical Data and Methods

2.1 Clinical Data

Subjects were selected from 76 patients with infectious diseases who received blood tests in our hospital, including 7 patients with syphilis, 13 patients with hepatitis C, 23 patients with hepatitis B virus and 33 patients with hepatitis B. In this experimental study, 76 patients understood the whole process of this study and signed informed consent, and were able to actively cooperate with the implementation of the corresponding prevention and control management. There were 45 male patients and 31 female patients, aged 18-81 years (37.67±4.25) years.

2.2 Methods

2.2.1 Route of Virus Transmission

AIDS, hepatitis C virus and hepatitis B virus are mainly transmitted through mucous membranes,
damaged skin, blood and other channels. Mucous membrane exposure, damaged skin exposure transmission; The corresponding medical instruments contaminated by the virus will enter the body of the close contacts through the damaged mucous membranes, such as puncture, blood collection instruments, non-disposable needles or syringes that are not strictly disinfected.

2.2.2 Preventive Measures and Control Measures

Clinical laboratory blood transmitted diseases prevention is mainly to avoid virus or blood transmitted diseases in patients with body fluids, direct contact with blood, reasonable to layout the clinical laboratory space, categorizing patients blood samples on science, improve disease awareness training for health care providers, and guide nurses correctly understand infection prevention and control methods, establishing good sterilization disinfection concept, ensure the safety of medical staff strictly abide by the correct scientific precautionary principle, all patients with body fluids, blood and other items as infectious items, for inspection procedures strictly follow the correct procedures, At the same time take appropriate protective measures.

The protective measures of medical personnel in the laboratory are as follows: wash hands in time according to the correct steps after contact with patients, and take strict protective measures after contact with any pathogens; Gloves must be worn during contact with body fluids or blood of patients. After the operation, remove the gloves and wash hands immediately. Hand disinfection should be performed for body fluids and blood of high-risk patients. During the examination, the patient's body fluids and blood may splash, so goggles, anti-permeability masks, gloves, etc. Should be worn; Wear an impermeable apron or isolation clothing during the operation to avoid a large area of body fluids or blood spatter during the operation; If there is exposed skin such as dermatitis, wound, etc., medical personnel should avoid participating in nursing work and avoid contact with contaminated instruments or utensils; If there is a wound on the skin, use disinfectant solution to clean it immediately, paste waterproof tape before continuing to work, and pay attention to wear latex gloves during wound treatment. Sufficient light should be ensured during the invasive operation, and attention should be paid to the operation procedure to avoid accidental needle stick injury. Disposable sharp instruments or contaminated needles shall be treated safely immediately after use, and shall be promptly disinfected and cleaned. Avoid direct contact with the blades, needles and other sharp objects after use, and do not walk around with contaminated sharp objects in the workplace to avoid accidental self-injury or stabblings; Regular disinfection and inspection of laboratory equipment by professionals; If accidental injury comes into contact with the blood of the patient, the blood should be squeezed out immediately, and the wound should be rinsed repeatedly. If blood infection is suspected, go to the emergency room immediately for treatment.

3. The Results

After the medical prevention and disease control carried out by the laboratory department, the disease in the laboratory department of our hospital achieved good results in prevention and control. No nosocomial infection occurred during the prevention process, and the effective rate of blood-borne disease prevention was as high as 100.00%.

4. Conclusion

Syphilis, AIDS, hepatitis c, hepatitis b can be transmitted through blood, and patients with virus is no more illness or disease state, unable to identify from appearance, but the virus to others through blood, therefore in the process of clinical laboratory work, there is a risk of infection, summarizes the test operation infection more channels for nasal, oral mucosal exposure to the virus blood infection; The virus is infected through broken skin; Infection caused by cutting a sharp instrument carrying the virus; Prolonged exposure to viral equipment during testing can lead to cross-infection. Therefore, good personal protection and hand hygiene are still effective measures for the prevention and control of disease infection [2].

Clinical laboratory staff to effectively avoid the occurrence of blood transmitted diseases, start
from oneself, attach importance to the harm of blood infection, actively implement the prevention and control measures to improve self work protection consciousness, strengthen practice, strengthen the implementation of clinical laboratory safety management system, at the same time to avoid occupational exposure, set the emergency plan, etc., continuously monitoring for suspected cases of infection, and fundamentally improve the safety of the inspection work, ensure the safety of patients and medical personnel to avoid blood transmitted diseases infection happened [3]. This study shows that after medical prevention and disease control is carried out by the laboratory department, the disease in the laboratory department of our hospital has achieved good prevention and control effect, no nosocomial infection occurs during the prevention process, and the effective rate of blood-borne disease prevention is as high as 100.00%.

To sum up, strictly implementing the prevention and control measures of blood-borne diseases in the laboratory can effectively control the occurrence of blood-borne diseases and ensure the safety and health of patients and medical personnel to the maximum extent, which has important clinical guidance value.

References

