

Observation on the Effect of Quality Control in Clinical Immunoassay

Rongfeng Sun

School of Medicine, Shihezi University, Shihezi, Xinjiang Uygur Autonomous Region, 832000, China

ABSTRACT. *Objective: To observe the effect of quality control in clinical immunoassay. Methods: 100 clinical immunoassay samples were selected for detection. Among them, 50 cases of immune test samples were tested by conventional test method, and the other 50 cases were tested by quality control method. After the immune test of the two groups of patients, the treatment effect of the two groups of patients were recorded and analyzed in detail. These 100 clinical immunoassay samples were selected from August 2019 to August 2020. Results: the treatment effect of patients who used quality control method for clinical immune test was much better than that of patients who used routine clinical immune test. Conclusion: compared with the conventional clinical immune test method, the quality control clinical immune test method is more scientific and reasonable, so the test method is worthy of promotion and use.*

KEYWORDS: *Clinical immunoassay, Quality control, Curative effect observation*

1. Introduction

The progress of science and technology has gradually led to the continuous development of modern medical level. With the rapid development of modern medical level, clinical immune test technology has entered the golden period of development. In order to make the test results of clinical immunity more accurate and stable, some researchers began to improve and perfect the methods of clinical immune test. In fact, due to the numerous links of clinical immune test, it is easy to make mistakes in the handover process of each link. Once there are errors in the whole process of the immune test, the quality will be seriously affected. If patients carry out clinical treatment according to the test results of quality impact, then the health of patients can not be guaranteed. For this reason, relevant medical researchers began to try to use the method of quality control for clinical immune test. This method can play a better test accuracy, so it can make patients have better treatment effect. This will be studied and analyzed below.

2. Data and Methods

2.1 General Information

Select 100 cases of clinical immune test samples for detection and research. Among them, 50 cases of immune test samples were tested by conventional test method, and the other 50 cases were tested by quality control method. After the immune test of the two groups of patients, the treatment effect of the two groups of patients were recorded and analyzed in detail. Only these 100 clinical immunoassay samples were selected from August 2019 to August 2020. There were 44 female patients and 56 male patients in the 100th case, and all patients had no underlying diseases. All the patients were volunteers to participate in the study under the condition of clear consciousness and fluent language expression ability.

2.2 Test Method

ELISA was used in both groups. However, it should be noted that 50 patients in the control group only use the conventional test methods for testing, while the patients in the experimental group need to use the method of quality control for clinical immune test. The so-called quality control method refers to the strict quality control in every link of clinical immune test. First of all, before the test, the relevant medical staff should collect the samples in accordance with the rules and regulations. Therefore, the relevant medical staff should analyze and record the collection time, posture and hemostasis time of related patients, including the use of anticoagulants in the whole sample collection process. In the process of immune test, all the immune test equipment and apparatus that will be used have been carefully reviewed and checked just before use to ensure that all the used equipment have no quality problems, and the performance of all equipment is inspected. After the equipment can be used as inspection equipment, all equipment should be strictly disinfected. In the process of relevant inspection, all operating appliances must be strictly used according to the steps in the manual. And after the test results come out, the relevant medical staff should review the test results again. If there are abnormal conditions, they should be checked in time to ensure the accuracy of the test results.

3. Result

After the two groups of patients were tested by different clinical immune test methods, the relevant medical staff according to the test results to carry out the treatment plan fitting the patient's test situation. After the treatment plan is drawn up, the relevant patients can start the treatment of the disease. But after the treatment process, the treatment effect was studied and analyzed, and the results were recorded in detail. The detailed data are shown in the table below. Through the data in the table below, it is not difficult to find that the final treatment effect of patients who use the routine clinical immune test method is significantly lower than that of patients who use the quality control method for clinical immune test. Therefore, the

quality control method to carry out the clinical immune test results are more accurate, so this method should be widely used.

Table 1 Comparative Analysis of Related Efficacy [n (%)]

group	Number of cases	cure	Remarkable effect	invalid	Total effective rate
control group	50	5(10.00)	17(34.00)	28(56.00)	22(44.00)
Observation group	50	21(42.0)	15(30.0)	14(28.00)	36(72.00)

Note: compared with the two groups, $P < 0.05$.

4. Conclusion

Because the final results of clinical immune test may be affected by the mistakes in the process of test handover, the final results of relevant clinical immune test are not very accurate. In order to avoid the related problems, medical researchers began to use the method of quality control on the basis of traditional clinical immunoassay. If this method is used for clinical immunoassay, the results of immunoassay will not be negatively affected due to the problems of equipment and testing reagents. It is very helpful to improve the accuracy of clinical immunoassay results. In the process of quality control, relevant medical staff must pay enough attention to sample collection. If there are errors in the sample collection process, the quality of the whole clinical immune test can not be guaranteed. Therefore, the relevant medical staff in the link of sample collection is to collect samples in accordance with the rules and regulations. Under the condition of ensuring the accurate collection time, scientific and reasonable disinfectants and anticoagulants should be used to ensure the reducibility of sample collection. At the same time, the relevant medical staff also need to carry out regular maintenance and inspection of relevant equipment and instruments for clinical immune test. If there are quality problems in the relevant instruments and equipment for clinical immune test, the relevant medical staff should repair and replace them in time, because the quality problems of the instruments and equipment lead to errors in the final results of the whole clinical immune test. At the same time, the medical staff who carry out the clinical immune test also need to have more professional working skills and more qualified professional quality. Only in this way can we reduce the probability of work errors in our daily work, and greatly reduce the probability of the accuracy of the final results of clinical immune test due to human influence. These are all the inspection procedures and specifications that must be followed in the process of clinical immune test by using quality control method. Therefore, from this point of view, the clinical immune test method of quality control should be more reasonable and advanced.

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