

Clinical adverse reaction analysis and countermeasures of combined application of multiple Western drugs

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Abstract: Objective: To analyze the clinical adverse reactions of the combined application of a variety of western medicines, and put forward relevant countermeasures. Methods: A total of 120 patients treated with combined western medicine in our hospital from February 2022 to February 2023 were selected for analysis. They were divided into study group and reference group respectively, after analyzing clinical adverse reactions, relevant countermeasures were adopted. No intervention measures were taken. Watch for adverse reactions. Results: The causes of adverse reactions in the two groups mainly included: poor compatibility, repeated medication, improper usage, improper dosage, etc. The occurrence frequency and incidence of adverse reactions in the study group were lower than those in the reference group, and the difference was statistically significant ($P < 0.05$). Conclusion: The combined use of a variety of western drugs is easy to lead to the occurrence of clinical adverse reactions. Detailed analysis of related factors can improve the rationality of drug use, effectively reduce the occurrence of adverse reactions, and play a positive role in improving drug safety.

Key words: A variety of Western drugs; Combined application; Adverse reactions; Coping measures

Introduction: In order to analyze the adverse reactions and countermeasures of the combined application of various western medicines. Based on this, this study selected some patients who were treated with a variety of western medicines and used different methods for intervention. After statistical analysis of relevant results, the following reports were analyzed.

1. Data and methods

1.4 General Information

Patients admitted to our hospital were selected as the study samples, and the types were patients receiving combined treatment with multiple western medicines. 120 patients were selected as the main analysis target, and the study was carried out in February 2022 and February 2023 as the end time. Patients were divided into two groups with an average of 60 patients in each group. The minimum to maximum age of all patients ranged from 20 to 80 years old, and the average age calculated by the overall age was (46.31 ± 6.79) years old. There was comparability.

1.5 Method

Patients included in the reference group were not given any medication intervention. After drug use, the study group analyzed the related influencing factors of adverse reactions, specifically as follows: (1) poor compatibility. In the process of clinical drug use, if doctors lack clinical experience or do not fully grasp the incompatibility during drug use, and at the same time, the particularity of drugs is not analyzed in detail during drug dispensing or use, a variety of adverse reactions will occur in patients in the process of drug combined application. (2) Repeated drug use. If the doctor in the process of medication, the lack of care, the use of the relevant notes, indications and dosage of improper grasp, will lead to the repeated use of drugs, resulting in adverse reactions of patients after medication. (3) Inaccurate drug use. During drug use, if the doctor does not make clear the drug group, or the method of drug use is not determined, it will lead to the inaccurate use of drugs, resulting in adverse reactions after the use of drugs^[3]. (4) The dose of medication used is not accurate. Before the use of drugs, doctors lack the accuracy of the patient's condition and adjust the dosage of drugs according to the patient's condition type, combined with the drug reference instructions and clinical symptoms. In this case, adverse reactions are likely to occur.

According to the analysis of the causes of adverse drug reactions, the following measures should be taken to prevent the adverse drug reactions: (1) Improve the drug use and management system. The hospital should improve the relevant management system according to the clinical situation and the standard of use of western medicine, and improve the standard of use. Doctors should be required to carry out the relevant management system according to the drug use and management mechanism during the use of relevant drugs, and pharmacists should conduct a comprehensive audit on the prescription after receiving it, so as to improve the management level. (2) Strengthen the management of drug

use in hospital. In the process of drug use, it is necessary to carry out multi-link supervision on drug use, and strictly check, in order to ensure the rationality, effectiveness, science and safety of drug prescription. (3) The plan for the combined use of Western medicines should be formulated reasonably. Detailed analysis of patients' conditions, understanding of individual differences among patients, detailed analysis of contraindications and indications for the combined use of western medicines, strengthening of drug management supervision, and arranging specials to carry out regular spot checks on drug use planning. (4) Implement the concept of individualized drug use. In the process of drug application, doctors should conduct detailed evaluation of patients' conditions, fully implement the policy of personalized medicine, and ensure the rationality and scientific nature of drug use method and dosage.

1.6 Observation indicators

The occurrence factors of adverse factors were analyzed, and the adverse reactions after intervention were analyzed.

1.4 Statistical treatment

Counting data n (%) and measurement data $(x \pm s)$ were the main data components in the study; The processing and analysis were completed by SPSS 23.0 software, and the recorded data were tested respectively, that is, the measurement data was tested by t ; X^2 was used to complete the test for counting data. If significant differences were found in the data, it indicated that there were differences and statistical significance ($P < 0.05$).

2 Results

2.1 Compare the causes of adverse reactions between the two groups

The causes of adverse reactions in the study group were less correlated with those in the reference group, and the difference was statistically significant ($P < 0.05$). See Table 1.

Table 1 Compare the causes of adverse reactions between the two groups (n/%)

| Groups | Number of cases | Poor compatibility | Repeated medication | Improper usage | Improper dosage |
|-----------------|-----------------|--------------------|---------------------|----------------|-----------------|
| Study group | 60 | 4 (6.67) | 4 (6.67) | 3 (5.0) | 5 (8.33) |
| Reference group | 60 | 9 (15.0) | 11 (18.33) | 8 (13.33) | 12 (20.0) |
| X^2 | | 7.689 | 6.297 | 5.258 | 5.236 |
| P value | | < 0.05 | < 0.05 | < 0.05 | < 0.05 |

2.2 The incidence of adverse reactions was compared between the two groups

The incidence of adverse reactions in the study group after intervention was lower than that in the reference group, and the difference was statistically significant ($P < 0.05$). See Table 2.

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Table 2 Comparing the incidence of adverse reactions between the two groups (n/%)

| Groups | Number of cases | Nausea and vomiting | Dizziness | Rash | Insomnia | Total incidence |
|-----------------|-----------------|---------------------|-----------|------|----------|-----------------|
| Study group | 60 | 2 | 1 | 1 | 1 | 5 (8.33%) |
| Reference group | 60 | 4 | 2 | 4 | 2 | 12 (20.0%) |
| X ² | | | | | | 5.897 |
| P value | | | | | | < 0.05 |

3 Discuss

There are many reasons for the occurrence of adverse reactions after the combined use of various western medicines, among which the incompatibility, adverse drug reactions, repeated medication and improper dosage and method of medication are related. Once adverse reactions occur after drug use, the therapeutic effect of patients will be affected, and the quality of life will also show a downward trend, leading to poor prognostic effect^[4]. After the analysis of relevant factors, the relevant intervention measures were proposed, which could effectively reduce the incidence of adverse reactions. In this study, relevant measures were adopted in the research group, and the results showed that

the incidence of adverse reactions was lower than that in the reference group ($P < 0.05$). Thus, in the process of combined application of western medicine, detailed analysis of drug use methods and pharmacological effects should be carried out to clarify the incompatibility and drug dosage. Based on this, rational use combined with the actual situation of patients can reduce the occurrence of adverse reactions.

To sum up, the application of a variety of combined western medicine treatments is very likely to lead to adverse reactions, so it is necessary to conduct clinical analysis of related factors and put forward solutions, so as to improve drug safety and effectiveness.

References:

- [1] Feng J J. Clinical observation of adverse reactions caused by cephalosporins combined with many Western drugs [J]. Chin J Practical Medicine, 202, 17(14):146-148. (in Chinese)
- [2] Zogulli Abra. [J]. World Latest Medical Information Abstracts, 2019, 19(68):138-139.
- [3] Li Z M. Clinical retrospective analysis of adverse reactions caused by combined application of multiple Western medicines [J]. [J]. Electronic Journal of Clinical Medicine Literature, 2019, 6(63):164+166.
- [4] Ran G Y. Analysis of clinical adverse reactions and preventive measures of combined application of multiple Western drugs [J]. World Latest Medical Information Abstracts, 2019, 19(47):197+199.