

Analysis of the effect of outpatient follow-up in pediatric anemia

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Abstract: With the acceleration of the pace of life in modern society and the increase of bad living habits, the number of pediatric anemia patients has gradually increased. As an important part of medical services, primary hospitals undertake the task of outpatient follow-up of pediatric anemia patients. By studying the implementation of outpatient follow-up in primary hospitals, this paper aims to explore how to improve the follow-up effect of pediatric anemia patients and provide relevant clinical reference and management suggestions.

According to the World Health Organization, there are about 3 billion people in the world with varying degrees of anemia, and tens of millions of people die every year due to various diseases caused by anemia ^[1]. The probability of suffering from anemia in China is much higher than that in Western countries. High-risk groups for anaemia are children, the elderly, women of childbearing age, and special populations such as oncology, haematological disorders, or perioperative patients. WHO says iron deficiency in children under two years of age can have serious and irreversible consequences for brain development and affect future learning performance. Iron deficiency in pregnant women can affect the child's future cognitive development, and even lead to anaemia, low birth weight and premature birth. Insufficient iron in adults may also cause adverse effects such as fatigue, decreased physical performance, and reduced productivity. On the contrary, excessive iron deposition in the body is mainly due to hereditary hemochromatosis, thalassemia, repeated blood transfusions or other conditions, which affect the absorption and regulation of iron, and if not treated, it will also affect health. A meta-analysis of 41 articles and a total of 79736 infants and young children was included in the study, aiming to systematically review the study on the prevalence of iron deficiency anemia (IDA) in infants aged 0~3 years in China from 2010 to 2019. Results: The overall incidence of anaemia was 25. 1%; The older the age, the lower the prevalence; Rural prevalence is higher than in urban areas; Prevalence has declined in recent years; The northwest region has the highest prevalence ^[2], but with the improvement and development of grassroots community health centers in southwest China, China is in a relatively weak trend compared with the medical care of developed countries.

1. Information and methodology

A primary hospital was selected as the research object, and the outpatient follow-up data of pediatric anemia patients in a certain period of time were collected, and statistical analysis was carried out. Follow-up mainly includes condition inquiry, physical examination, hemoglobin/red blood cell count test, nutritional guidance, and medication guidance. The effects of follow-up were assessed through physician evaluation and analysis of follow-up data using a combination of qualitative and quantitative methods.

1.1. The importance of outpatient follow-up in primary hospitals for pediatric anemia patients

Follow-up is one of the important indicators to measure the effectiveness of treatment. Follow-up in the outpatient setting of primary hospitals allows for more timely understanding of changes in the patient's condition and can adjust treatment options. For example, a 3-year-old patient who was followed up after treatment for anemia found that his haemoglobin level had not returned to the normal range. During the follow-up visit, the doctor further evaluated the patient's diet and lifestyle habits and found that his iron intake was insufficient, so as to adjust the dietary guidance and improve the treatment effect.

1.2. Specific implementation in outpatient follow-up of pediatric anemia patients

Outpatient follow-up in primary hospitals specifically includes the following: (1) Condition inquiry: The doctor asks the patient in detail about the patient's disease symptoms, treatment and changes in quality of life. (2) Physical examination: The doctor examines the patient's height, weight, heartbeat, breathing, etc. to assess his growth and development. (3) Hemoglobin/red blood cell count test: By performing a blood test, the doctor can understand the patient's degree of anemia and changes in the condition. (4) Nutrition guidance: Doctors introduce the importance of supplementing nutrition to patients and their parents, and provide targeted dietary advice. (5) Medication guidance: For different types of anemia, doctors can prescribe corresponding drugs according to the patient's situation, and explain the medication methods and precautions to the patient.

1.3. Problems and causes in outpatient follow-up

In the outpatient follow-up of pediatric anemia patients, there are the following problems: (1) Insufficient follow-up frequency: Due to the limited resources of primary hospitals and the heavy workload of doctors, the frequency of follow-up visits is insufficient. (2) The content of follow-up is not perfect: some doctors do not pay enough attention to the investigation, evaluation and guidance during the follow-up process, so that the treatment effect of patients cannot be improved in a timely and effective manner. (3) Insufficient awareness of the importance of follow-up: Some patients and parents do not fully understand the significance of outpatient follow-up, resulting in not cooperating with doctors' work and treatment plans.

2. Problem analysis

2.1 Lack of individualization at follow-up

At present, many outpatient follow-up of pediatric anemia patients is carried out according to a fixed pattern and cannot be managed individually for each patient's specific situation. This led to a decrease in follow-up effectiveness.

2.2 Poor exchange of information

In the process of outpatient follow-up, there is a lack of effective communication platform between doctors and patients, resulting in poor information transmission, and doctors cannot understand the patient's condition and needs in time, thus affecting the treatment effect.

3. Management Recommendations

In order to improve the outcome of outpatient follow-up in pediatric anemia, the following are several management recommendations:

3.1 Develop a personalized follow-up plan

According to the specific situation of each patient, develop a personalized follow-up plan, including the frequency of follow-up, the content of follow-up and the follow-up method. For example, for patients with hypomethemoglobinosis, an appropriate follow-up plan can be developed based on laboratory findings and treatment.

3.2 Establish a multidisciplinary collaboration mechanism

We need to establish a multidisciplinary collaboration mechanism, including pediatricians, dietitians, psychologists, etc., to participate in the outpatient follow-up of pediatric anemia patients. By working together, more comprehensive health management can be provided to help patients recover.

3.3 Provide a wealth of health education

Strengthening health education is one of the important means to improve the effect of follow-up. By providing patients and parents with education on pediatric anemia, diet regulation, rational drug use, etc., it can improve patients' self-management ability and reduce the recurrence rate of the disease.

3.4 Enhance information exchange

We need to establish an effective information exchange platform to enable timely and accurate communication between doctors and patients about the condition and treatment. For example, you can set up an online consultation platform or set up a dedicated mobile application so that patients and doctors can communicate anytime, anywhere.

4. Implementation effect

To illustrate the effectiveness of the above management recommendations, here are some concrete examples:

4.1 Implementation of personalized follow-up plans

Depending on the patient's specific situation, an individualized follow-up plan is developed. Patient A is a 3-year-old boy with iron deficiency anemia. Based on the results of his laboratory tests, monthly follow-up was established, including hemoglobin measurement, iron therapy assessment, and nutritional counselling. During the follow-up visit, through interaction with the patient and his parents, it was learned that the patient's eating habits and treatment adherence improved, and the

hemoglobin level also increased steadily.

4.2 Effects of multidisciplinary collaboration

In the outpatient follow-up of pediatric anemia patients, doctors participate with nutritionists, psychologists and other experts to provide comprehensive medical services. For example, doctors diagnose and guide patients based on their condition and treatment options; dietitians provide dietary advice; and psychologists provide psychological support and counseling. This multidisciplinary approach allows for a more holistic focus on the patient's health needs and improved outcomes.

4.3 Implementation effect of health education

Through health education activities on anaemia in children, patients and their parents are able to gain more knowledge and management of anaemia. Their understanding of dietary conditioning and rational medication use has increased, and their self-management ability has been improved. This helps patients better control their condition and reduce the number of relapses.

4.4 Effectiveness of the Information Exchange Platform

An online consultation platform has been established, and patients can communicate with doctors anytime, anywhere through mobile phones. During the follow-up visit, patient B found that the effect of iron supplementation was not good, and communicated with the doctor through online consultation and made timely adjustments. This way of communication can more easily solve patients' questions and problems and improve the follow-up effect.

5. Conclusion

Outpatient follow-up of pediatric anaemia patients in primary hospitals is very important. This paper aims to improve the follow-up effect and provide better medical services and management suggestions for patients with pediatric anemia by studying the implementation of outpatient follow-up of pediatric anemia patients. Primary hospitals should strengthen training, improve doctors' follow-up skills and awareness, increase the frequency of follow-up, and strengthen communication with patients and families. In addition, patients and families should have a deeper understanding of the significance of outpatient follow-up and actively participate in it. Through these efforts, we believe that the follow-up effect of pediatric anemia patients will be significantly improved, and we make the following recommendations. First of all, the training of doctors should be strengthened in grassroots hospitals to improve the awareness and diagnosis and treatment of anemia. Secondly, during the follow-up process, the doctor should ask the patient's condition and treatment effect in detail, and adjust the treatment plan in time. In addition, during outpatient follow-up, attention should be paid to creating a good atmosphere of doctor-patient communication to enhance patients' sense of trust and willingness to cooperate. Finally, at the social level, prevention and publicity on anaemia in children should be strengthened to promote healthy lifestyles for all.

References

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