

Analysis on nursing care of patients with rheumatoid arthritis treated with etanercept and methotrexate

Sun Xinhui, Sun Lixue and Ma Shu*

The First Hospital of Jilin University; Changchun, Jilin, 130021, China

*Corresponding Author

Key words: etanercept combined with methotrexate; Treatment; Rheumatoid arthritis; Nursing analysis

Abstract: Objective: To analyze the effect and value of the nursing form in the treatment of rheumatoid arthritis with etanercept and methotrexate. **Methods:** 100 patients with rheumatoid arthritis in our hospital were randomly divided into the control group and the observation group, with 50 patients in each group. All patients were treated with etanercept and methotrexate, but the control group received routine nursing and the observation group received comprehensive nursing, and then compared two groups of patients in the treatment and nursing of morning stiffness, joint deformity, occurrence probability of adverse symptoms, such as anemia, low thermal contrast of the two groups after treatment nursing efficiently, and collect the opinions of the patients, understand the patients in the treatment and nursing satisfaction point to correct them. **Results:** Observation group patients morning stiffness, joint deformity, a lower risk of adverse symptoms such as anemia, low thermal, observation group of patients overall treatment effectiveness is higher, at the same time observation group are not satisfied with treatment and nursing of point about his condition did not obviously improve, the control group in the treatment and nursing satisfaction point related to staff work form, analysis of the two groups have significant difference ($P < 0.05$). **Conclusion:** Rheumatoid arthritis can be combined with clinical symptoms, appropriate etanercept combined with methotrexate treatment, combined with a comprehensive form of nursing, pay attention to patients during the treatment of morning stiffness, joint deformity, anemia, low fever and other problems, help to improve the effect of nursing.

Introduction

Frequent rheumatoid arthritis in women, have different clinical manifestations, some patients characterized by low thermal for a long time, the characteristics of the onset of some patients present a cyclical, combined with the clinical characterization, reasonable to give etanercept combined with methotrexate, etanercept can be competitive with $\text{TNF-}\alpha$ in the body, by inhibiting $\text{TNF-}\alpha$ binding to TNF receptors on the cell surface, blocking immune cell signaling, inhibition of tumor necrosis factor activity, regulate inflammation. Methotrexate, internationally recognized as the preferred treatment for rheumatoid arthritis, inhibits the synthesis of tumor cells and growth and reproduction by inhibiting dihydrofolate reductase. Under the combined action of both, combined with comprehensive care, can help patients recover more efficiently.

1 Materials and Methods

1.1 General Materials

100 patients with rheumatoid arthritis in our hospital were randomly divided into the control group and the observation group, with 50 patients in each group. All patients were treated with

etanercept and methotrexate, but the control group received routine nursing and the observation group received comprehensive nursing. The age of the patients in the control group ranged from 36 to 61 years old, and the duration of disease ranged from 6 months to 48 months. The age of patients in the observation group ranged from 35 to 63 years old, and the duration of disease ranged from 4 months to 45 months. In this treatment and nursing, the following conditions were excluded: severe kidney disease, liver disease, leukopenia $< 3.0 \times 10^9/L$, thrombocytopenia $< 100 \times 10^9/L$, age > 70 years, malignant tumor, pregnancy or insufficient contraception, history of alcoholism/drug abuse, acute or chronic infection and lung disease. Have corresponding medicine and nursing risk assessment, improve the blood routine, liver and kidney function, chest X ray film (1 year) before using this drug screening, viral hepatitis, pregnancy test, ask the patient's medical history at the same time, patients have a preliminary understanding and communication ability, have clinical compliance, and to investigate the treatment and nursing knowledge, with a more positive, has the treatment of economic strength, the medical and nursing is not exclusive.

1.2 Methods

(1) treatment:

① etanercept: 25mg per time, subcutaneously, two times a week. Dissolve with 1 ml of water before injection and refrigerate for 72 hours after dissolution.

② methotrexate: the first oral dose is usually 5mg-7.5mg (2-3 tablets) once a week; If the effect is good and tolerated, 2.5 (1 tablet) can be added every 2 to 4 weeks, with a maximum dose of 15-20mg/ week. It is best to take it at a fixed time every week. For the first 3 months, check blood, urine routine and liver and kidney function once every 2 weeks, and then check blood and urine routine and liver and kidney function once every 1 to 3 months.

(2) routine nursing:

Medication requirements, guide the patients medication and check after autologous drug reaction, actively communicate with staff, guide the patients to do the inspection, observed whether patients with giant young red blood cell anemia, oral ulcer, mild liver damage or have severe peripheral neuritis, appropriate folic acid supplementation, female patients after drug withdrawal, instruct patients before getting pregnant, and more than one year to methotrexate poisoning, excessive application of leucovorin 6 ~ 12 mg muscle injection, 6 hours, a total of four times, necessary for hemodialysis, combined with the doctor's advice to adjust symptoms, with the patient, for long-term medication to patients who were not short time effective, It indicates the nature of drug action and improves patient compliance.

(3) comprehensive nursing:

① health education: introduce the advantages of drug application, answer the doubts of patients, professional questions such as methotrexate as an anti-cancer drug why used in rheumatoid treatment? Common questions such as: why do you still not see a significant effect after a few months of medication? Shall specify methotrexate side effects of small advantages, let patients know about its role in drug effect is slow, clinical improvement need 1 ~ 6 months, illustrates the treatment of other cases, also can guide the ward patients combined with drug use feeling, instruct patients continued drug use to work, to avoid patients lose faith in drugs and ignore the medication regularly.

② drug properties: etanercept must be stored at 2° C to 8°C. Freezing is strictly forbidden. Give the drug as soon as you have prepared the solution. If the drug cannot be administered immediately after preparation, it can be stored for 72 hours at 2° C to 8°C. Do not use after expiration date of carton or bottle of medicine. The preservation temperature, color and nature of the combined medicine in nursing should be strictly checked and the safety of medication should be paid attention to.

③ morning stiffness: the patient can first drink a cup of hot water, and then gradually flexion and extension of the joint, the family ready warm towel for the patient hot compress, the patient can rub their hands, gradually rub hot palm, palm gentle massage joints, the fingertips of both hands contact, before and after activities.

④low heat: continue to measure the body temperature of patients, physical cooling, pay attention to keep warm, to avoid the invasion of wind evil, the night sleep attention to cover the quilt, but appropriate transfer of attention, listen to light music to ease the discomfort of low heat, the use of antipyretic stick to help patients cool down, pay attention to the balance of diet, reduce mental work.

⑤ joint deformities: do not use a joint activity in the daily activities, but using the methods, such as a bottle, do not use finger strength when opening cans, pay attention to the palm pressure activity, often active joints, does not maintain an action for long, maintain reasonable position, avoid severe joint deformation, reduce energy consumption, will be required for patients with everyday objects are put on the bedside table, to avoid patients take goods is not convenient enough, the joints of exercise.

⑥ anemia: avoid patients' blind blood, can supplement folic acid, vitamin b12, usually can eat more almonds, hazelnuts, walnuts, peanuts, corn, wheat germ and other foods rich in vitamin E, if there is need also can be oral vitamin E capsule.

1.3 Observation Indexes

Compared the two groups patients in the treatment and nursing of morning stiffness (morning when patients showed the stiffness of the joint activities, along with the degree of inflammation, morning stiffness were obvious, with the progress of the treatment, the symptoms of morning stiffness can alleviate), joint deformities (mainly displays in the joints, limbs in patients with hand joint spindle swelling, foot lateral deflection, swan neck deformity, button different symptoms, such as pattern deformed foot back toe deformity, valgus, plantar toe joint subluxation, bent at hammer toe and foot valgus), anemia (mainly for patients with moderate or mild anemia, is a joint inflammation caused by other complication, Is common in arthritis), low thermal (patients with low thermal and catch a cold, cold, trauma and other factors, can be buoyed by the external environment, when the body symptoms such as a cold induced joint inflammation, characterized by repetitive), causing adverse symptoms such as contrast of the two groups after treatment nursing efficiently, combined with patient arthritis pain time, frequency, patients' feeling, the change of clinical symptom, investigate the other complications such as probability statistics and distinction. And collect the opinions of patients, respect the opinions of patients, ensure the patients in the survey express clearly, accurately and truly, understand the patients in the treatment and nursing point of dissatisfaction to correct.

1.4 Statistical Treatment

Excel software such as medical office under the discrete data statistics and classified count (X^2 test, is used to infer that two or forming than there is difference between the overall rate), matching measurement data comparison between samples or groups (t test, observe the differences of this group of samples with overall), \bar{x} (average) $\pm s$ (Standard Deviation) said mean add and subtract Standard Deviation, the small probability event of statistical quality control ($P < 0.05$ said have significant difference (one hundred trials, the frequency is less than 5 times).

2 Results

According to clinical observation, 2 cases of morning stiffness, 2 cases of joint malformation, 0 cases of anemia and 1 case of low fever were observed in the observation group, and 3 cases of morning stiffness, 2 cases of joint malformation, 1 case of anemia and 2 cases of low fever were observed in the control group. The complication rate of the two groups was 5:8, accounting for 10%: 16%.

Table 1. adverse symptoms of the two groups of patients in treatment and nursing

group	n	morning stiffness	Joint malformation	anemia	low fever	total rate
-------	---	----------------------	-----------------------	--------	--------------	---------------

the observation group	50	2	2	0	1	10%
the control group	50	3	2	1	2	16%
X ²	-	5.296	5.748	4.596	5.869	5.126
P	-	<0.05	<0.05	<0.05	<0.05	<0.05

The overall treatment effectiveness of the patients in the observation group was relatively high, while the points of dissatisfaction with treatment and nursing in the observation group were related to their own condition without significant improvement, while the points of dissatisfaction with treatment and nursing in the control group were related to the working form of the staff, and the comparative analysis of the two groups showed significant difference ($P<0.05$).

Table 2. comparison of the overall effective rate of the two groups of patients in treatment and nursing

group	effective	excellent	noneffective	total effective rate
the observation group	28	19	3	96%
the control group	24	16	10	80%
X ²	5.285	2.412	3.265	9.261
P	< 0.05	< 0.05	< 0.05	< 0.05

Table 3. satisfaction scores of patients in the two groups during nursing [n (%)]

group	n	satisfaction	general satisfaction	dissatisfaction	the satisfaction rate
the observation group	50	33	16	1	49 (98%)
the control group	50	30	13	7	43 (86%)
X ²	-	1.265	2.365	4.125	3.274
P	-	<0.05	<0.05	<0.05	<0.05

3 Discussion

Rheumatoid arthritis in women, and the incidence is higher in 40 ~ 60 patients, patients with diverse clinical manifestations, should be combined with etanercept and methotrexate, ruled out is not fit for etanercept combined with methotrexate therapy of the patients, introduce to the patients with etanercept and methotrexate security, effectiveness, improve the treatment of patients with confidence, combined with targeted for nursing patients with clinically common adverse problem, this paper mainly summarizes the morning stiffness, joint deformity, anemia, low thermal, time in practical nursing should be analyzed on the basis of other symptoms in patients with care, patient oriented, Around the patient's nursing situation of seeking truth from facts, the nature of the nursing process to strengthen drug inspection, to ensure the safety of the patients with drug use, regularity, continue to observe the patient's medication feedback, combined with drug reactions in patients with communication with doctors and drug dose adjustments, etc., through comprehensive nursing, drugs play a role, to achieve efficient therapeutic effect.

References

- [1] Shi Chunhua, Ren jun. Nursing analysis of etanercept combined with methotrexate in the treatment of rheumatoid arthritis [J]. Practical Gerontology, 2015,29 (07): 615-616.
- [2] Shu Biying, Cai Feng. Nursing analysis of etanercept combined with methotrexate in the treatment of rheumatoid arthritis [J]. International Journal of Laboratory Medicine, 2018,39 (24): 3032-3035.
- [3] Luo Ting. Nursing analysis of etanercept combined with methotrexate in the treatment of rheumatoid arthritis [J]. China Pharmacoeconomics, 2017,12 (11): 86-89.

- [4] Ji Xia. Nursing care of etanercept combined with methotrexate in the treatment of rheumatoid arthritis [J]. Modern Diagnosis and Treatment, 2014(16):3828-3829.
- [5] Zhang Xiuqin. Nursing experience of etanercept combined with methotrexate in the treatment of rheumatoid arthritis [J]. Zhejiang Medical Science, 2017(21):116-117.
- [6] Zhang Chao, He Yahui. Analysis of the clinical efficacy of methotrexate and etanercept in the treatment of rheumatoid arthritis [J]. Chinese and Foreign Women's Health Research, 2017:67.
- [7] Lin Yufei. Observation on the efficacy of etanercept combined with methotrexate in the treatment of rheumatoid arthritis [J]. China Pharmaceutical Industry, 2014, 19(12):52-53.
- [8] Wei Sha. Evaluation on the effect of etanercept in the treatment of rheumatoid arthritis [J]. Contemporary Medical Theory, 2018, 16(11).
- [9] Li Xiaozhen. Efficacy observation of methotrexate combined with etanercept in the treatment of rheumatoid arthritis [J]. World Journal of Clinical Medicine, 2017, 11(8).