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ARTICLE

Clinical features, Treatment and Prognosis Analysis of T-cell non-Hodgkin's Lymphoma

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Abstract: Objective: Regarding T-cell non-Hodgkin's lymphoma, it is important to explore both its clinical characteristics and treatment methods, as well as to make a good prognostic analysis. Methods: From 2017.02 to 2022.02, 40 patients with T-cell non-Hodgkin's lymphoma were seen in our hospital, and their data were implemented retrospectively. RESULTS: According to certain indicators of patients, they were divided into low-risk group (0-1 factors), low-medium-risk group (2 factors), high-medium-risk group (3 factors), and high-risk group (4-5 factors); after first-line treatment, the 3-year overall survival rates of patients with CR, PR, SD, and PD were 71%, 46%, 0%, and 0%, respectively; after treatment with CHOP-like regimens and other chemotherapy regimens, CR, PR, SD, and PD patients had 5-year overall survival rates of 44%, 36%, 0%, and 0%, respectively; after first-line treatment, CR patients were 16, PR patients were 16, and the effective rate was 80%, and SD+PD was 8. The CHOP-like regimen was used to treat 9 patients with CR, 9 patients with PR, 6 patients with SD, and 4 patients with PD; other chemotherapy regimens were used to treat 2 patients with CR, 4 patients with PR, 3 patients with SD, and 3 patients with PD, with an efficiency rate of 60% and an inefficiency rate of 40%. Conclusion: T-cell non-Hodgkin's lymphoma is easy to be misdiagnosed, and the prognosis analysis should be explored according to its clinical characteristics, combined with the treatment regimen, in order to ensure a significant treatment effect.

Keywords: T-cell; non-Hodgkin's lymphoma; clinical features; treatment; prognostic analysis

Malignant heterogeneous solid tumors occur in lymphoid tissues and are called malignant lymphomas. In the organs of the whole body, various lymphoid tissues are distributed, so lymphoma may occur in any part of the organism, commonly in the lymph nodes. Lymphoma usually tends to occur in the spleen, thymus, and tonsils, and also in the mucous membranes along the intestines and bronchi, and may occur due to malignant proliferation of lymphoid tissue. When lymphoma occurs, lymph node swelling is both painless and progressive in nature, and may manifest as both fever and enlargement of the spleen and liver. Because of the different locations, there are differences in symptoms and differences in signs. If symptoms occur systemically, both in patients with advanced disease and in those with diffuse lesions; they are not only prone to anemia, weight loss, and local pressure symptoms, but also to debilitation and cachexia. If it enters the bone marrow, it may trigger anemia, make leukopenia, trigger complications, make thrombocytopenia, trigger bleeding; in the central nervous system, it is prone to both cerebral compression, motor paralysis, and perceptual disorders; infiltrating the pleura, it is prone to fluid accumulation, which in turn affects breathing; infiltrating the bile duct, it is prone to obstructive yellow; infiltrating the mediastinum, it is prone to The infiltration of the bile ducts may lead to obstructive yellow; the infiltration of the mediastinum may lead to superior vena cava obstruction. In addition, lymphoma cells are prone to various symptoms because they produce cytokines. Interleukins, for example, can cause fever and a positive inflammatory response. From the present point of view, lymphomas are both Hodgkin's and non-Hodgkin's lymphomas. In this study, the clinical features, treatment options and prognosis analysis of T-cell non-Hodgkin's lymphoma are

discussed with respect to these three aspects, and the clinical experience in treating T-cell non-Hodgkin's lymphoma is discussed and generalized, which in turn provides effective experience for research in this field. The details are as follows:

1 Materials and Methods

1.1 General data

From 2017.02-2022.02, 40 patients with T-cell non-Hodgkin's lymphoma were seen in our hospital, and their data were implemented retrospectively. Diagnostic criteria: (1) first occurrence of malignant tumor in the organism; (1) malignant tumor in just one part of the organism; (2) absence of any abnormal cells in the periphery and bone marrow; (4) recurrent lymphoma in a distant site, which should be separated from the primary lymphoma by several months; (5) patients did not suffer from lymphoma before. Patients' clinical data included both sex, age, pathological type, clinical stage, B symptoms, breast dehydrogenase (LDH), as well as extra-nodal invasion, treatment, remission, overall survival time (OS), and progression-free survival time (PFS). Patients were treated with chemotherapy alone in 20 cases, radiotherapy alone in 2 cases, combined radiotherapy and chemotherapy in 16 cases, and concomitant infection after surgical treatment in 1 case.

1.2 Methods

According to the evaluation criteria for the efficacy of non-Hodgkin's lymphoma, there were both complete remission (CR) and partial remission (PR), as well as stable (SD) and progressive (PD), with CR plus PR as effective (RR) and SD plus PD as ineffective (NR); overall survival time (OS) was the time from patient diagnosis to death or final follow-up; progression-free time (PFS) was the time from patient diagnosis to tumor progression after treatment time after treatment. Patients with CR, PR, SD, PD were treated with CHOP-like regimen, other chemotherapy regimens.

1.3 Statistical methods

SPSS software was used for statistics, and survival analysis as well as univariate analysis was implemented.

2 Results

2.1 Clinical characteristics

Among the 40 cases of T-cell non-Hodgkin's lymphoma, their pathological types:8 cases of peripheral T-cell lymphoma-nonspecific, 8 cases of mesenchymal large cell lymphoma, 6 cases of angioimmunoblastoma T-cell lymphoma, 6 cases of T-lymphoblastic lymphoma, 10 cases of NK/T-cell lymphoma, 1 case of adult T-cell lymphoma, and 1 case of subcutaneous lipofuscinous T-cell lymphoma. The number of patients was 40, with 28 male patients and 12 female patients, the ratio of male to female patients was 7:3; the number of Han Chinese patients was 28 and the number of minority patients was 12; the median age of onset was 44 years old, and the age of onset was below 60 years old in 30 cases; the number of type I/II patients was 12, accounting for 30%, and the number of type III/IV patients was 28 The number of type I/II patients was 12, accounting for 30%, and type III/IV patients was 28, accounting for 70%. According to age (>60 years), clinical stage (stage III/IV), mobility score (PsâL'ě2), extra-junctional organ invasion (>1), and elevated serum LDH level, each item was given a score and divided into low-risk group (0-1 factors), low-medium-risk group (2 factors), high-medium-risk group (3 factors), and high-risk group (4-5 factors).

2.2 Recent therapy

After first-line treatment, the efficiency rate was 80% in 16 patients with CR, 16 patients with PR, and 8 patients with SD+PD. Nine patients with CR, nine patients with PR, six patients with SD, and four patients with PD were treated with CHOP-like regimen; two patients with CR, four patients with PR, three patients with SD, and three patients with PD were treated with other chemotherapy regimens, with an efficiency rate of 60% and an inefficiency rate of 40%. Treatment by the above three regimens had an effective rate of 60% or more, which showed that the treatment regimen was effective.

2.3 Long-term survival

The overall survival rates of patients at 1, 3, and 5 years were 52%, 43%, and 43%, and the progression-free overall survival rates were 45%, 41%, and 41%. After first-line treatment, the 3-year overall survival rates were 71%, 46%, 0%, and 0% for patients with CR, PR, SD, and PD, respectively; after treatment with CHOP-like regimens and other chemotherapy regimens, the 5-year overall survival rates were 44%, 36%, 0%, and 0% for patients with CR, PR, SD, and PD, respectively; after first-line treatment, consolidation of effective patients with conventional dose therapy and transplantation, the 5-year overall survival rates were 36% and 72%, respectively; the 5-year overall survival rates were 100% for I/II patients and 23% for III/IV patients.

2.4 Univariate analysis of prognosis

Univariate analysis showed that stage III/IV, LDH elevation, bone marrow invasion, and presence of B symptoms proved poor prognosis, P<0.05. P>0.05 regardless of age, or treatment regimen. the number of stage III/IV patients was 28 cases, accounting for 70%, with 1-year overall survival rate of 38%, 3-year overall survival rate of 27%, and 5-year overall survival rate of 20%; LDH elevation patients The number of patients with increased LDH was 20, accounting for 50%, with an overall survival rate of 20% at 1 year, 11% at 3 years, and 11% at 5 years; the number of patients with bone marrow invasion was 32, accounting for 80%, with an overall survival rate of 52% at 1 year, 43% at 3 years, and 43% at 5 years; the number of patients with B symptoms was 12, accounting for 30%, with an overall survival rate of 69% at 1 year, 69% at 3 years, and 69% at 5 years. overall survival rate was 69% and 5-year overall survival rate was 69%. (As shown in Table **??**).

Table 1: Analysis of prognostic risk factors for T-NHL.

Project	Number of Patients	Percentage of Patients	1-year overall survival rate	3-year overall survival rate	5-year overall survival rate	P-value
Gender						0.126
Male	28	70%	66%	33%	23%	
Female	12	30%	62%	62%	62%	
Age						0.312
âĽd’60 years old	24	60%	55%	51%	44%	
>60 years old	16	40%	41%	21%	21%	
Clinical Stage						0.012
I/II	12	30%	100%	100%	100%	
III/IV	28	70%	38%	27%	20%	
LDH						0.023
Normal	20	50%	81%	71%	71%	
Increased	20	50%	20%	11%	11%	
Symptom B						0.034
Yes	2	5%	0%	0%	0%	
No	12	30%	69%	69%	69%	
Marrow Invasion						0.021
Yes	8	20%	0%	0%	0%	
No	32	80%	52%	43%	43%	
First-line Chemotherapy						0.125
CHOP-like	32	80%	49%	44%	44%	
Other	8	20%	55%	36%	36%	
Transplantation						0.225
Yes	8	20%	100%	74%	74%	
No	32	80%	41%	36%	36%	

3 Results

With the environmental pollution and food pollution, malignant tumors have plagued people's health and life, which not only bring pain to people's body, but also increase their burden of life and even take their lives. In order to better treat malignant tumors, practical strategies should be adopted to facilitate proper treatment of patients, summarize relevant experiences and lessons learned, promote clinical experience and relevant research in this field, and thus make positive contributions to this field. In the treatment of malignant lymphoma, it is important to adopt a practical treatment plan based on the clinical characteristics of malignant lymphoma. Based on age (>60 years), clinical stage (stage III/IV), mobility score (Ps âL'ě2), extra-nodal organ invasion (>1), and elevated serum LDH levels, patients are classified into low-risk (0-1 factors), low-medium-risk (2 factors), high-medium-risk (3 factors), and high-risk groups (4-5 factors). According to the different clinical characteristics of the patients, different treatment plans are implemented for the patients, which can not only promote the patients to get proper treatment, but also promote the patients to get quick treatment and turn their lives around as soon as possible, and then promote the malignant tumors to be cured or alleviated. Through the clinical characteristics of patients with different malignant tumors, treatment is carried out according to the grade to promote proper treatment on the one hand, and to promote remission on the other hand, which is conducive to the further work of medical and nursing staff. Generally speaking, patients in the low-risk group are relatively easy to treat and the treatment methods adopted are relatively simple, and they can recover quickly; patients in the high-risk group are relatively complicated to treat and the treatment methods adopted are relatively complex, and the treatment process takes more time and the patients recover relatively slowly. Therefore, in order to promote early recovery or alleviate the condition of patients, we should understand the clinical characteristics of patients and provide patients with practical treatment plans according to all clinical characteristics of patients, so as to promote patients to better accept surgical treatment and avoid postoperative infection, which may affect postoperative recovery and even lead to death. At the same time, the clinical experience is summarized, the clinical treatment effects of the patients are analyzed, and the clinical experience is summarized and summarized, and the effective clinical experience is promoted to make positive contributions to the treatment and research in this field. After understanding the different clinical characteristics of the patients, various therapeutic measures were taken for them. First, first-line treatment is used. After first-line treatment, there were 16 patients with CR, 16 patients with PR, with an efficiency rate of 80%, 8 patients with SD+PD, and 20% with no efficiency. It can be seen that after using first-line treatment, the patients had an effective rate of 80%, but there was also a 20% inefficiency rate. The 3-year overall survival rates of patients with CR, PR, SD, and PD after first-line treatment were 71%, 46%, 0%, and 0%, respectively. After first-line treatment, the 5-year overall survival rates were 36% and 72% for effective patients with conventional dose therapy consolidation and transplantation, respectively; 100% for I/II patients and 23% for III/IV patients. In other words, patients need further treatment to make them more efficient and minimize inefficiency, so that they can be treated adequately. Second, patients were offered CHOP-like regimens and other chemotherapy regimens for treatment according to their specific needs, so that they could be treated properly after receiving first-line therapy. Nine patients with CR, nine patients with PR, six patients with SD, and four patients with PD were treated with the CHOP-like regimen; two patients with CR, four patients with PR, three patients with SD, and three patients with PD were treated with other chemotherapy regimens. The overall survival rates of patients at 1, 3, and 5 years were 52%, 43%, and 43%, and the progression-free overall survival rates were 45%, 41%, and 41%. the 5-year overall survival rates of patients with CR, PR, SD, and PD after treatment with the CHOP-like regimen and other chemotherapy regimens were 44%, 36%, 0%, and 0%, respectively. In other words, after patients were treated with CHOP-like regimens and other chemotherapy regimens, patients were properly treated, but there are certain problems that need to be improved, especially in SD and PD patients, where the 5-year overall survival rates are relatively low, and there is a need to upgrade treatment protocols to promote proper treatment of patients and improve malignancy treatment protocols, which will be studied and discussed, and properly practiced in the clinic to promote clinical The research is more significant, and the clinical experience is promoted and popularized to promote scientific treatment of malignancies, especially for T-cell non-Hodgkin's lymphoma, making it worthy of better treatment and providing effective treatment options in this field. After treatment was administered to the patients, a univariate analysis of prognosis was taken, and the results showed that stage III/IV, increased LDH, bone marrow invasion, and the presence of B symptoms proved a poor prognosis, $P<0.05$. $P>0.05$ regardless of age, or treatment regimen. the number of patients with stage III/IV was 28, or 70%, with an overall survival rate of 38% at 1 year, 27% at 3 years, and 20% at 5 years. The number of patients with increased LDH was 20, or 50%, with an overall survival rate of 20% at 1 year, 11% at 3 years, and 11% at 5 years; the number of patients with bone marrow invasion was 32, or 80%, with an overall survival rate of 52% at 1 year, 43% at 3 years, and 43% at 5 years; the number of patients with B symptoms was 12, or The number of patients with B symptoms was 12, accounting for 30%, and the overall survival rates were 69% at 1 year, 69% at 3 years, and 69% at 5 years. It can be seen that the prognostic univariate analysis, which analyzes the overall survival rates of patients at 1, 3, and 5 years, can tell whether the treatment plan provided to the patients is effective, but from the results, although good results were also achieved, there is a need to improve the treatment plan. Although given the limitations of the current level of medical care, it is necessary to adopt

practical and effective strategies under the limited conditions so that patients can be treated properly, learn from the experience of the treatment process on the one hand and the lessons learned from the treatment process on the other hand, so that patients can be treated properly, provide patients with proven treatment plans, and do a specific analysis of each case so that patients can receive individualized treatment and also receive We also need to learn from the experience of the treatment process, so that patients can be treated properly, provide patients with effective treatment plans, and provide specific analysis, so that patients can receive individualized treatment and specific treatment. In this way, patients can be treated effectively, and treatment plans and strategies can be improved, and practical clinical experience can be developed to provide practical treatment measures for patients in related fields, so that they can receive treatment in a faster and less painful way, and patients can be relieved and recovered as soon as possible, and patients can be treated properly. In conclusion, regarding T-cell non-Hodgkin's lymphoma, it is important to understand not only its clinical features but also its treatment options as well as its prognosis analysis during the treatment process. By implementing such treatment steps, patients can be properly treated, and relevant experiences as well as drawbacks can be summarized, and based on this, proven treatment plans can be adopted and proven clinical experiences can be provided to patients, which will lead to less pain while receiving treatment, faster recovery after receiving treatment, avoiding risks as much as possible, and providing better recovery opportunities as well as conditions for patients.

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The authors declare no conflict of interest.

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