

Analysis of Clinical Effect on 68 Cases with Non Hodgkin's Lymphoma in Head and Neck

Hong Li¹, Xuanqin Wang², Minghong Li¹, Hua Yang¹, Xuming Chan¹

¹Department Otorhinolaryngology and Head-Neck the Third Military Medical University affiliated Xinqiao Hospital, Chongqing 400037, China

²Department Otorhinolaryngology the Chongqing Medical University affiliated Paediatric Hospital, Chongqing 400014, China

Abstract Objective To explore the diagnosis and treatment of Non Hodgkin's lymphoma (NHL) in head and neck. **Methods** After the pathological diagnosis, 68 patients with NHL are clinical staged and classified in pathological tissue types, 42 patients accepted systematic treatment, 20 patients accepted chemotherapy alone and 6 patients radiotherapy only. **Results** The survival rates of the 68 patients who could survive for 1 year and 5 years more were 56% and 22% respectively. Among survivals, most of them were early patients and their lymphoma was less serious; while among the deaths, most were clinical terminal. **Conclusion** The purpose of diagnosis should include the affirmation type of lymphoma and the pathologica area. Repeated biopsy should be carried out if the massis unclear in these areas. Chemotherapy combine with radiotherapy and operation is proved to be the most efficient therapeutic means. The prognosis is correlated to classification of clinical stage and histological type.

Key words Non Hodgkin's Lymphoma; Diagnosis; Therapy; Head and neck

With the progress of technology on treatment and diagnosis, the incidence of non-Hodgkin lymphoma (NHL) in head and neck has risen up in clinic, which took about 3.0% of the tumors in head and neck. NHL had no special clinical feature, thus it is easy to be misdiagnosed or missed diagnosis, especially the primary extranodal NHL. So we report the clinical data of NHL patients from 1997 to 2002 combined with documents, in order to explore the diagnosis and treatment of Non Hodgkin's lymphoma (NHL) in head and neck.

MATERIALS AND METHODS

Clinic materials

Of 68 patients, there were 50 male and 18 female, their age ranged from 4-63 years with mean age of 43 years old. The diagnosis of NHL was confirmed by

pathology, there were 22 T-cell lymphoma patients (Fig. 1) and 46 B cell lymphoma patients (Fig. 2) according the WHO classification in 2001, and the ratio was 1:2.09.

Staging

The staging of the patients with the Ann Arbor staging system in 1971 was as follows: 23 of 68 cases were stage I (33.8%), 13 of them were stage II (19.1%), 12 were stage III (17.6%) and 20 were stage IV (29.4%).

Clinical presentation

22 cases had neck masses, 14 cases had pharyngeal foreign body sensation with pharynx pain, 28 cases with rhinostegnosis and rhinorrhagia, 4 cases had facial swelling, subcutaneous nodules and itch of skin.

Treatment

The patients were treated with chemotherapy plus surgery or radiotherapy. The patients with extranodal primary lymphoma or relatively localized extranodal involvement were treated by operation and postoperative chemotherapy, 6 early cases of them were treated by radiotherapy. The greatest number of patients received

Correspondence to: Hong Li, male, MD, attending doctor

Tel: 13060211898

023-68774311

Email: leehong7118@yahoo.com.cn

CHOP or modified CHOP, and the COP or CHOP was often used also, and there were other treatments such as AVCP or ESAP. The chemotherapy or radiotherapy after operation had better effect.

RESULTS

68 patients had been followed-up for 5 years, and there were 40 survivals in the first year, the survival rate was 58%; 15 patients survived in 5 years, the survival rate was 22%.

DISCUSSION

The incidence of NHL, which takes 89.11%, is higher than that of HD which takes 10.19% of the malignant lymphoma in head and neck in China. Majority of NHL was B-cell lymphoma and T-cell lymphoma only takes 16%. The primary extranodal NHL in head and neck have respective distribution in their cell origin. Our groups showed that NHL in nasal cavity and nasal sinuses presented with T-cell lymphoma and NHL in pharynx and larynx presented with B-cell lymphoma, which indicated that they had respective predilection sites in head and neck, which was similar to other domestic reports^[1-4].

NHL in head and neck has no typical early symptom, the clinical symptom, sign and the auxiliary examination were lack of specificity. The diagnosis of NHL mainly depend on pathology, histologic typing and immunohistochemical test which are helpful to affirm the subtype of lymphoma and determine the involved site and field. The symptoms and signs must be recorded in detail, especially focus on superficial lymph nodes and the size of the liver and spleen. Necessary

laboratory examination including hemogram, the bone marrow cell morphology and biopsy so on must be also performed. The skeleton should be suspected of involvement if accompanied with inhibition of hemogram, the lymphadenectasis is the characteristics of this disease. NHL in head and neck usually presented as a painless, progressive enlargement of the superficial lymph node. If superficial lymphadenectasis with unknown cause didn't response to antibiotic and antituberculous therapy and the lymph nodes had no adhesion with peripheral tissues, the NHL should be highly suspected. The definitely diagnosis of lymphadenectasis of unknown cause is depended on repeatedly biopsy and lymph node printing slides^[5,6]. About 25%~50% of extranodal NHL of head and neck presented in tonsillar ring. The palatine tonsil is the first common area involved in patients with NHL and the secondary area are nasopharynx and root of tongue. Because the patients often have no conscious symptoms in early or only slight pharyngeal paraesthesia such as foreign body sensation or dry sensation. The NHL in palatine or lingual tonsil often presents with ganoid unilateral hyperplasia, which was neglected by doctors to result in the delayed diagnosis for lacking of biopsy. Four cases in our group with tonsillar hemihypertrophy were misdiagnosed in local hospitals, which were confirmed as NHL of tonsil by biopsy until ipsilateral deradenoncus presented and transfer to our hospital. The majority of NHL in nasal cavity and nasal sinuses is T-cell NHL, which often occurs in inferior nasal concha, middle nasal concha, floor of nose, nasal septum, maxillary sinus and ethmoidal sinus, its manifestation is rhinostegnosis and rhinorrhagia. Covered with normal mucosa, the tumor often was pathologically diagnosed as chronic inflammation due to the specimen gotten superficially. In addition, do not

Tab 1 The compare of curative effect of NHL with different pathologic type

Pathology	Number of patients	Survivals of 1 year	Survival rate of 1 year	Survivals of 5 year	Survival rate of 5 year
BC	46	28	60.9	11	23.9
TC	22	12	54.5	4	18.2
Total	68	40	56.0	15	22

Comparison of survival rate of 1 year in different type: $\chi^2=0.16$ $P>0.05$

Comparison of survival rate of 5 year in different type: $\chi^2=0.22$ $P>0.05$

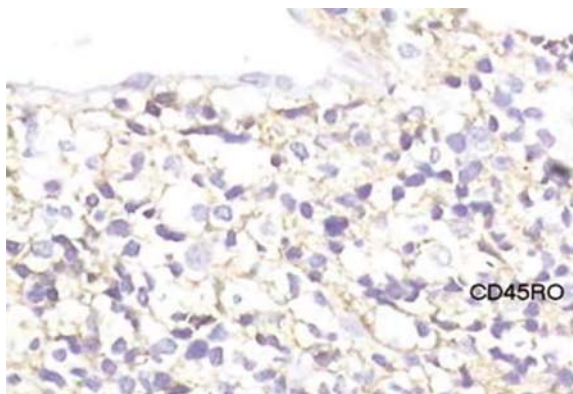


Fig. 1 CD45RO by immunohistochemistry of T-cell type

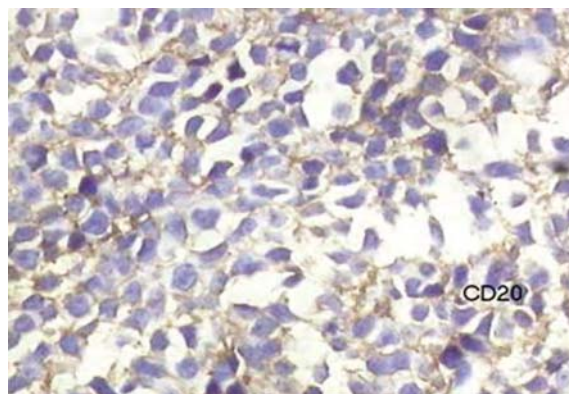


Fig. 2 CD20 by immunohistochemistry of B-cell type

squeeze the specimen to avoid influence on diagnosis. One of our patients was diagnosed definitely as NHL of T-cell type after four repeated biopsy. 18 of all 68 patients were diagnosed definitely by over twice biopsy. 2 cases were reported as lymphadenitis in the first biopsy, and 6 cases were reported as reactive hyperplasia of lymph node. The definite diagnosis depends on biopsy through local excision for pathology. The fine-needle aspiration cytology is minimally invasive and convenient, but lack of reliability.

The treatments for NHL include monotherapy (radiotherapy, chemotherapy or operation alone) and combined therapy. The treatment modality should be based on the tumor's primary site, histological type, clinical stage and patients' conditions. The preferred therapy modality plays a key role of therapeutic effect. The NHL of head and neck had tendency of distal spread and higher recurrence rate, so the modality of radiotherapy after chemotherapy should be preferable. Because the first chemotherapy can rapidly control the constitutional symptom and insidious lesions out of irradiation fields and reduce the radiotherapy fields, which can increase the therapeutic effect and decrease the systematic influence. As to the NHL primarily presented in nasal cavity, nasal sinus and throat, the early diagnosis and surgery combined with postoperative chemotherapy or radiotherapy will have better outcome. The surgery plays secondary role in treatment of NHL through which to get specimen for pathological examination. When taking diagnostic operation, the tumors

should be resected as far as possible. 6 cases of lymphoma of tonsil were all treated with tonsillectomy combined with postoperative chemotherapy or radiotherapy, and the 5-year survival rate was 24% (3/12), the patients were all in early stage and have low grade, which suggested that the prognosis was closely related to the clinical stage and pathological category, it also indicated that administration of systematic therapy could significantly improve the prognosis and survival.

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