

原文題目(出處)：	Biopsy of cervical lymph node F. Matsumoto et al. Auris Nasus Larynx 2009;36 :71-4
原文作者姓名：	Fumihiko Matsumoto, Shin Itoh, Shin-ichi Ohba, Hidenori Yokoi, Masayuki Furukawa, Katsuhisa Ikeda
通訊作者學校：	Department of Otorhinolaryngology, Juntendo University School of Medicine, Tokyo, Japan
報告者姓名(組別)：	郭芯妤(I組)
報告日期：	05. 08. 2009

內文：

Abstract :

This report examines 60 non-cancer patients who underwent a cervical lymph node biopsy, and discusses the value of the cervical lymph node biopsy as a diagnostic tool. The results suggest that a biopsy should be considered early to patients with an advanced age, large swollen lymph nodes or high levels of serum sIL-2r or LDH.

Introduction :

1. Lymph node enlargement usually results from benign infectious, however, we also fear the causes include microbial, hematological, neoplastic, and connective tissue disorders.
2. Doctor should decide either to wait and closely observe the patient or to proceed to a lymph node biopsy. It is obvious that a delayed diagnosis of a serious, especially malignant, disease may be critical for the patient, but an unnecessary lymph node biopsy may increase patients' anxiety and the medical costs.
3. Decision-making process for a lymph node biopsy has been empirical. Identifying patients with peripheral lymphadenopathy(淋巴結病變) who will benefit from lymph node biopsy is often difficult.
4. Making a diagnosis of metastatic cancer is not difficult even in primary unknown carcinoma. Fine needle aspiration cytology (FNAC) is highly reliable in the identification of metastatic carcinoma, which limiting the requirement for a diagnostic excision biopsy in many patients.
5. Except FNAC, many cervical lymph node biopsies were required for the definite diagnosis.

Material and methods :

1. 60 patients (28 males and 32 females) with cervical lymph node enlargement had lymph node biopsies at the Juntendo University between 2004 and 2007. Ages ranged from 20 to 88 years (median: 53).With clinically significant enlarged lymph node persisted or increased in size despite the appropriate therapy.
2. No patient had received any treatment before the biopsy and patients with carcinoma were excluded.
3. The clinical parameters including age, size of the lymph node, white blood cell (WBC), C reactive protein (CRP), lactate dehydrase (LDH), soluble interleukin-2 receptor(sIL-2r) were measured at initial examination.
4. Fine needle aspiration cytology was carried out in all patients. Aspirations were performed using a 23-gauge needle, and a 20-ml syringe under ultrasound guidance.
5. The patients were divided into 2 groups, including the malignant lymphoma (ML)

group and the benign disease group. These groups were compared based on the patient's clinical parameters.

Results

1. The final diagnosis indicated that more than half the patients had malignant lymphoma (39; 65%), 5 had tuberculosis, 3 had sub-acute necrotizing lymphadenitis, and 13 had non-specific lymphadenopathies.
2. Serum levels of LDH, sIL-2r, age and lymph node size in the ML group were significantly higher than in the benign group.
3. WBC and CRP showed no significant differences.
4. All patients with benign lymph node enlargement had no malignant findings with FNAC. No false positive cases were observed. 11 out of the 39 patients with ML had FNAC reported as ML. Each of clinical parameters was compared by a single regression analysis (迴歸分析). Simple regression analysis showed there are correlation between the size of enlargement lymph node and serum levels of LDH and sIL-2r in ML group.

Discussion

1. An enlargement of the peripheral lymph nodes is a common clinical presentation of many pathological conditions, including
 - lymphoreticular malignancies
 - metastatic malignant processes
 - reaction to local or systemic inflammatory conditions
 - response to systemic autoimmune diseases and immunization.Most cases of lymphadenopathy in all generations are due to infection or benign diseases.
2. The clinical history, physical examination, and laboratory and radiological findings may give important clues for the diagnosis. However, some cases require an excisional biopsy for the definite diagnosis. In the general population, only 3.2% of cases required biopsy and only 1.1% had malignancy.
3. "Greenfield and Jordan" presented a principle for the clinical investigation of lymphadenopathy in a primary care practice. After the exclusion of
 - local lesions or infections,
 - toxoplasmosis(鉤蟲症)
 - cytomegalovirus(CMV)
 - Epstein-Barr virus mononucleosis,they suggested that other systemic conditions must be pursued by biopsy of the persistent enlarged lymph nodes
4. FNAC is often the first line of investigation (screening test) used in cases of lymphadenopathy to differentiate between lymphoreticular malignancy, metastatic cancer, specific infections such as tuberculous lymphadenitis, and non-specific reactive lymphadenitis. However, the distinction between reactive and malignant lymphoid proliferations is the most difficult aspect in lymph node FNAC.
4. It is important that negative FNAC results do not exclude lymphoma in patients with unexplained lymph node enlargement, and lymph node biopsy should be considered depending on the clinical findings, especially in a facility in which flow cytometry(流式細胞測試儀) cannot be administered.

5. How to evaluate if in need of lymph node biopsy?
- Metastatic cancer is distinguished from other diseases associated with cervical lymph node enlargement.
 - A definitive diagnosis cannot be made by FNAC or other examinations, the patient must be followed closely, with a diagnosis of non-specific lymphadenopathy.
 - Regular follow-up is absolutely necessary for patients with lymphadenopathy which is not definitely indicated for a lymph node biopsy.
 - The results of this study suggest that a biopsy should be considered in patients with :
 - advanced age
 - large swollen lymph nodes
 - high levels of serum sIL-2r or LDH without additional and reiterative clinical examination.

題號	題目
1	以下對淋巴結敘述何者正確? (A) Pain, movable suggested mostly acute infection (B) Slightly movable, painless suggested mostly benign neoplasm (C) Non-movable, painless suggested mostly malignancy (D) 以上皆是
答案(B)	出處：Illustrated Anatomy of the Head and Neck Cha.10 P255
題號	題目
2	Cervical lymph node 蒐集以下何處之淋巴液? (A) 舌下區 (B) 耳後區 (C) 頸部器官 (D) 以上皆是
答案(D)	出處：Illustrated Anatomy of the Head and Neck Cha.10 P250