รายงานผู้ป่วยโรคคิคูชิในโรงพยาบาลศรีสังวรสุโขทัย

Kikuchi's disease: Case report in Srisangwornsukhothai Hospital

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ABSTRACT

Background : Kikuchi's disease (KD) or Kikuchi-Fujimoto disease (KFD) or Histiocytic necrotizing lymphadenitis (HNL) is a rare, benign self-limiting disease. It is rare in Thailand. Searching of Kikuchi's disease in Thailand via internet, only 3 papers presented by pathologists and medicine doctors were found.

Objective : To report a case of KD in ENT department, Srisangwornsukhothai Hospital and review the literatures.

Methods : Case report

Case report : A 25 year-old woman had a right posterior cervical lymphadenopathy of one week's duration. She did not responded to antibiotic treatment. Fine needle aspiration suggested reactive lymphoid hyperplasia. Lymph node biopsyrevealed a diagnosis of Kikuchi's disease. The literature review is presented.

Conclusion : KD should be considered as a differential diagnosis in patients who had cervical lymphadenopathy and not respond to antibiotic treatment.

Key words : Kikuchi's disease (KD), Cervical lymphadenopathy

บทคัดย่อ

เหตุผลการนำเสนอ : โรคคิคูชิ หรือคิคูชิ-ฟูจิโมโต หรือต่อมน้ำเหลืองอักเสบย่อยสลายจากฮิสติโอไซต์ เป็นโรคไม่รุนแรง หายได้เอง และพบได้น้อยในประเทศไทยมีการพูดถึงโรคนี้ไม่บ่อย จากการค้นหาทางอินเตอร์เน็ตเกี่ยวกับโรคนี้ พบการรายงานเพียง 3 ฉบับ โดยพยาธิแพทย์และอายุรแพทย์

วัตถุประสงค์ : เพื่อนำเสนอผู้ป่วยโรคคิคูชิที่พบในกลุ่มงานโสตศอนาสิก โรงพยาบาลศรีสังวรสุโขทัย และรวบรวมสรุปรายงานเกี่ยวกับโรคคิคูชิ

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รายงานผู้ป่วย : ผู้ป่วยหญิงไทยอายุ 25 ปี มีอาการต่อมน้ำเหลืองที่คอด้านขวาส่วนหลังโต ได้รับการรักษาด้วยยาปฏิชีวนะแต่ก้อนไม่ยุบลง จากการดูดชิ้นเนื้อด้วยเข็ม ตรวจบ่งชี้เป็นรีแอคทิฟลิมฟอยด์ไฮเปอร์เพลเซีย (reactive lymphoid hyperplasia) จากการผ่าตัดต่อมน้ำเหลืองส่งตรวจวินิจฉัยเป็นน้ำเหลืองอักเสบย่อยสลายจากฮิสติโอไซต์ หรือโรคคิคูชิ

สรุป : ควรนึกถึงโรคคิคูชิด้วย ในผู้ป่วยที่มาด้วยต่อมน้ำเหลืองที่คอโต และไม่ตอบสนองต่อยาปฏิชีวนะ

คำสำคัญ : โรคคิคูชิ ต่อมน้ำเหลืองที่คอโต

Introduction

Kikuchi's disease (KD) or Kikuchi-Fujimoto disease (KFD) or Histiocytic necrotizing lymphadenitis (HNL) was first described in 1972 by Kikuchi[1] and Fujimoto et al[2] as a benign, self-limiting disease. In 1985, Gleeson et al reported the first case in the otolaryngologic literature[3]. Most reports have been published in pathologic and medicine literatures. Searching of Kikuchi's disease in Thailand, only 3 papers presented by pathologists and medicine doctors were found.[4, 5, 6]

KD is an Asian predilection, which mostly affects young females between 20-30 years of age. The female to male ratio of KD is about 3-4:1[7-10]. In Thailand, there is a 23 case-review paper, showing female to male ratio of 3.6:1[4]. KD is usually present with cervical lymphadenopathy. Some patients may have low-grade fever, weight loss, anorexia, fatigue, nausea or vomiting.

The etiology of KD is unknown, but an abnormal autoimmune reaction after viral infectioin has been suggested 11. Several microorganisms such as Epstein-Barr virus, Human herpes virus[12], Cytomegalovirus, Toxoplasma and Yersinia Enterocolitica have been studied. However, no research has confirmed a relationship between KD and those microorganisms[13].

KD should be excluded from tuberculosis, lymphoma, systemic lupus erythematosus (SLE), etc. Laboratory studies are useful in ruling out other diseases, such as SLE.

The definite diagnosis is only archieved by pathologic study from tissue biopsy.

KD usually resolves in 1-6 months. But recurrent lymphadenopathy has also be reported

Case report

A 25 year-old single female had a right cervical mass and mild sore throat for 1 week. She had no fever, weight loss or loss of appetite. Physical examination showed 2 enlarged lymph nodes, with sizes 0.5 and 1.0

cm in diameter, at the right posterior cervical region. The lymph nodes were firm, mild-tender and slightly movable. Pharynx and tonsils were not infected. Her vital signs and other organ examinations were normal. She had received antibiotic treatment for 10 days prior to her visit to ENT department.

At ENT department the patient showed no further symptoms except the lymph nodes were more enlarged. Physical examination revealed 3 posterior cervical lymph nodes, with sizes 1.0, 1.5 and 1.5 cm in diameter. Head and neck examinations were normal.

Fine needle aspiration was performed. The pathologic report one week later was suggestive of reactive lymphoid hyperplasia. However, as the lymph nodes were still large, the patient was sent to operative room the following week for excisional biopsy. The pathologic report revealed the lymph node tissue with large areas of necrosis with abundant nuclear debris and nuclear fragmentation. The nuclear debris areas were surrounded by transformed lymphocyte and histiocytes that showed some nuclear atypia. Special stain for acid fast bacilli was negative. The pathologic diagnosis was histiocytic necrotizing lymphadenitis. The patient was prescribed NSAIDs for treatment of nodal pain with a follow-up appointment 2 weeks later. Laboratory test Complete blood count (CBC) showed WBC of 6,770/cumm with 59% neutrophils, 26.7% lymphocytes, 37.9% hematocrit, and platelet of 203,000. Erythrocyte sedimentation rate (ESR) was 12 mm/hr. Anti HIV was negative and antinuclear antibody (ANA) was negative. Chest x-ray showed mild infiltration at left lower lung but she has no respiratory symptoms.

She had no additional symptoms but a new neck node, sized 1 cm in diameter, was developing below the incisional wound. She was prescribed prednisolone 30 mg/day for 1 week. The lymph node still persisted but decreased size. She is still followed up.

Discussions

KD is a rare, benign, self-limiting disease, which usually affects 20-30 year-old females. Female to male ratio is about 3-4:17-10 and in Thailand the female to male ratio is 3.6:1[4]. The ratio is different in children. A report of KD in 23 children in Taiwan shows the ratio of girl to boy of 1:1.9[14].

KD is usually present with cervical lymphadenopathy (80%)[15], however lymph node can be present at axilla[4], groin, parotid area[16], etc. In patients with cervical lymphadenopathy, the posterior cervical triangle is predilection (65-70%)[17, 18]. Unilateral involvement is more common than bilateral involvement and multiple nodes are more typical than single node[14]. For example, this patient has multiple nodes at right posterior cervical triangle. Other symptoms include low-grade fever, weight loss, anorexia, fatigue, nausea, and vomiting[15]. Hepatomegaly or splenomegaly are also reported[10, 19]. Cutaneous

lesions were reported as maculopapular, mobiliform or rubella-like, urticarial and drug eruption-like lesions[20].

Laboratory tests are useful to rule out the other diseases, but do not confirm KD. Chest x-ray is helpful in finding clues of TB or Tumor while Antinuclear antibody (ANA) may indicate the association to SLE. Patient with KD may have mild leucopenia (16.6-58.3%)[9, 16-18, 21, 22]. increased erythrocyte sedimentation rate (ESR) and C-reactive protein(CRP)[8,9,16,17,21,22]. My patient showed normal CBC, ESR, AntiHIV and ANA but these tests were done after pathologic report was received (about 2 months from the onset). Chest x-ray showed mild infiltration at left lower lung although she had no respiratory symptoms. TB or Tumor is not likely.

KD should be differentiated from tuberculous lymphadenitis, malignat lymphoma, SLE, cat-scratch disease, toxoplamosis, AIDS, Yersinia lymphadenitis, Kawasaki's disease and infectious mononucleosis[16, 23]. TB LN exclusion is important because of its high prevalence in Thailand and different treatment. Previous reports have shown the association between KD and SLE at about 1.3-7%[16, 20, 21, 24-26]. Both diseases can precede, coincide or follow with each other[8, 9, 16, 20-22, 24, 25]. Some authors recommended that patients with KD should be monitored for SLE in the long term[10, 27].

Definite diagnosis can be achieved by excisional biopsy, but uses of fine needle aspiration (FNA) in diagnosis have also been reported28. The pathologic findings of KD are patchy eosinophilic necrosis especially in paracortex, karyorrhectic debris (karyorrhexis = rupture of the cell nucleus in which the chromatin disintegrates into formless granules which are extruded from the cell), clusters of plasmacytoid T cells, trasformed lymphocytes (immunoblasts) predominantly T cell, histiocyte and macrophages containing degenerated lymphocyte nuclear debris, and absence of neutrophils[8, 17, 23].

SLE pathology may look similar to KD as both show necrotic area with histiocytic and immunoblastic infiltration but the presence of plasma cell and hematoxylin bodies will confirm diagnois of SLE.

In this case, FNA showed reactive lymphadenopathy, but the lymph nodes still enlarged and the patient was worried.So after a complete head and neck examination the patient was sent to operative room for excisional biopsy and the definite diagnosis was archieved.

KD usually resolves without treatment in several weeks to 6 months. Some authors use corticosteroids to speed up results or prevent serious outcome in complicated cases[11, 24, 27, 29-31]. KD recurrent rate ranges from 1.3-4% but recurrent disease still shows no malignant transformation[8, 9, 22].

Conclusion

KD should be considered as one of the differential diagnoses in patients with cervical lymphadenopathy and not respond to antibiotic treatment.

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Reference

1. Kikuchi M. Lymphadenitis showing focal reticulum cell hyperplasia with nuclear debris and phagocytosis. Nippon Ketsueki Gakkai Zasshi 1972;35:379-80.
2. Fujimoto Y, Kozima Y, Yamaguchi K. Cervical subacute necrotizing lymphad enitis. A new clinicopatholgical entity. Naika 1972;20:920-7.
3. Gleeson MJ, Siodlak MZ, Barbatis C, Salama NY. Kikuchi's a new cause of cervical lymphadenopathy. J Laryngol Otol 1985;99:935-9.
4. Thongsuksai P, Kayasut K. Histiocytic necrotizing lymphadenitis (Kikuchi's dis ease): clinicopathologiccharacteristics of 23 cases and literature review. J Med Assoc Thai. 1999 Aug;82(8):812-8.
5. Mootsikapun P, Sirijerachai J, Nanagara R. Kikuchi-Fujimoto's disease, histiocytic necrotizing lymphadenitis, mimickin-gsystemic lupus erythematosus. J Med Assoc Thai. 2002 Sep;85(9):1037-41.
6. Maek-a-nantawat W, Viriyavejakul P. My cobacterium szulgai lymphadenitis mimicking Kikuchi's disease in Thailand. Southeast Asian J Trop Med Public Health. 2001 Sep;32(3):537-40.
7. Louis N, Hanley M, Davidson NM. Kikuchi-Fujimoto disease: a report of two cases and an overview. J Laryngol Otol. 1994;108:1001-4
8. Garc??a CE, Girdhar-Gopal HV, Dorfman DM. Kikuchi-Fujimoto disease of the neck. Update. Ann Otol Rhinol Laryngol. 1993; 102:11-5
9. Tsang WYW, Chan JKC, Ng CS. Kikuchi's lymphadenitis. A morphologic analysis of 75 cases with special reference to unusual features.Am J Surg Pathol. 1994; 18:219-31
10. Dorfman RF, Berry GJ. Kikuchi's histio-cytic necrotizing lymphadenitis: An analysis of 108 cases with emphasis on differential diagnosis. Semin Diagn Pathol 1988;5:329-45.
11. Nikanne E, Ruoppi P, Vornanen M. Kikuchi's disease: report of three cases and overview. Laryngoscope. 1997;107: 273-6
12. Hollingsworth HC, Peiper SC, Weiss LM, Raffeld M, Jaffe ES. An investigation of the viral pathogenesis of Kikuchi-Fujimoto disease: lack of evidence for Epstein-Barr virus or human herpesvirus

type 6 as the causative agents. Arch Pathol Lab Med. 1994;118:134-40.

13. Martinez-Vazquez C, Potel C, Angulo M, et al. Nosocomial Kikuchi's diseasea search for herpesvirus sequences in lymph node tissues using PCR. Infection 2001;29:143-7.
14. Hsin-Ching Lin, MD, FARS; Chih-Ying Su, MD; and Shun-Chen Huang, MD. Kikuchi's Disease in Asian Children. 2005;115;92-6 Pediatrics
15. Brian J. Baumgartner, Eric R. Helling. Kikuchi's disease: A case report and review of the literature.Ear, Nose & Throat Journal.May, 2002. Available from: URL:http.//www.findarticles.com/p/articles/mi_m0BUM/is_5_81/ai_86849967/print
16. Madle-Samardzija N, Turkulov V, Vukadinov J, Stajnic S, Canak G. Histiocytic necrotizing lymphadenitis (Kikuchi-Fujimoto disease). Med Pregl. 2000;53: 513-16.
17. Chamulak GA, Brynes RK, Nathwani BN. Kikuchi-Fujimoto disease mimicking malignant lymphoma. Am J Surg Pathol 1990;14:514-23.
18. Turner RR, Martin J, Dorfman RF. Necro tizing lymphadenitis. A study of 30 cases. Am J Surg Pathol 1983;7:115-23.
19. Pileri S, Kikuchi M, Helbron D, Lennert K. Histiocytic necrotizing lymphadenitis without granulocytic infiltration. Virchows Arch A Pathol Anat. 1982;395:257-71
20. Seno A, Torigoe R, Shimoe K, et al. Kikuchi's disease (histiocytic necrotizing lymphadenitis) with cutaneous involvement. J Am Acad Dermatol 1994;30: 504-6.
21. Lin HC, Su CY, Huang CC, Hwang CF, Chien CY. Kikuchi's disease: a review and analysis of 61 cases. Otolaryngol Head Neck Surg. 2003;128: 650-3
22. Kuo TT. Kikuchi's disease (histiocytic necrotizing lymphadenitis). A clinico pathologic study of 79 cases with an analysis of histologic subtypes, immunohistology, and DNA ploidy. Am J Surg Pathol. 1995;19:798-809
23. Lerosey Y, Lecler-Scarcella V, Francois A, Guitrancourt JA. A pseudotumoral form of Kikuchi's disease in children: a case report and review of the literature. Int J Pediatr Otorhinolaryngol. 1998;45:1-6
24. Mart??nez-Va?zquez C, Hughes G, Bordon J, et al. Histiocytic necrotizing lymphadenitis, Kikuchi-Fujimoto's disease, associated with systemic lupus erythematosus. Q J Med. 1997;90:531-3
25. Vila LM, Mayor AM, Silvestrini IE. Thera peutic response and long-term follow-up in a systemic lupus erythematosus patient presenting with Kikuchi's disease. Lupus. 2001;10:126-8

26. Imamura M, Ueno H, Matsuura A, Kamiya H, Suzuki T, Kikuchi K, Onoe T. An ultrastructural study of subacute necro tizing lymphadenitis. Am J Pathol. 1982; 107:292-9
27. Lin SH, Ko WS, Lee HS, Hwang WS. Kikuchi's disease associated with lupuslike syndromea fatal case [letter]. J Rheumatol 1992;19:1995-6.
28. Hsueh EJ, Ko WS, Hwang WS, Yam LT. Fine-needle aspiration of histiocytic necro tizing lymphadenitis (Kikuchi's disease). Diagn Cytopathol 1993;9:448-52.
29. Jang YJ, Park KH, Seok HJ. Management of Kikuchi's disease using glucocorticoid. J Laryagol Otol 2000;114:709-11.
30. Chan JK, Wong KC, Ng CS. A fatal case of multicentric Kikuchi's histiocytic necro tizing lymphadenitis. Cancer. 1989;63: 1856-62
31. Quintas-Cardama A, Fraga M, Cozzi SN, Caparrini A, Maceiras F, Forteza J. Fatal Kikuchi-Fujimoto disease: the lupus connection. Ann Hematol. 2003;82:186-8