

## Case Report

# Kikuchi-Fujimoto Disease - A Case Report

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## Abstract

**Introduction:** Kikuchi-Fujimoto's disease is known as histiocytic necrotizing lymphadenitis and occurs sporadically in people without a family burden for the condition. The disease occurs with high fever, enlarged lymph nodes, skin rashes and headaches.

**Case presentation:** We report a case of a 57-year-old man with cervical necrotizing lymphadenitis, in which we have proven by biopsy that it is a rare disease of Kikuchi.

**Conclusion:** Kikuchi's disease is a very rare disease, mainly seen in Japan, as the nature of the disease is benign and self-limiting. The likelihood of relapse is less than 3 percent and when treated correctly, mortality is very rare.

## INTRODUCTION

Kikuchi Fujimoto's disease was described in Japan in 1972. It is known as histiocytic necrotizing lymphadenitis, Kikuchi necrotizing lymphadenitis, phagocytic necrotizing lymphadenitis, subacute necrotizing lymphadenitis and necrotizing lymphadenitis [1-4]. Kikuchi disease occurs sporadically in people without a family history. It was first described by Dr. Masahiro Kikuchi [5] and independently of Fujimoto Y.

We report a case of a man with cervical necrotizing lymphadenitis, in which we have proven by biopsy that it is a rare disease of Kikuchi.

## BACKGROUND

The disease occurs with high fever, enlarged lymph nodes, skin rashes and headaches [6]. Less frequent hepatosplenomegaly, asthenadenamia, and nervous system involvement with signs similar to meningitis.

There are several supposed causes of disease development. Bacterial / viral agents or autoimmune conditions are blamed. Microbacterium szulgai, Yersinia and Toxoplasma, as well as HHV6, HHV8, parvovirus B19, HIV, HTLV-1 and Epstein-Barr virus [1]. Many independent studies, however, fail to identify the presence of these infectious agents in the case of Kikuchi lymphadenopathy [7].

Disease is the result of a non-specific hyper immune reaction to various infectious, chemical, physical and neoplastic agents. Autoimmune conditions and manifestations such as antiphospholipid syndrome, polymyositis, systemic juvenile idiopathic arthritis, bilateral uveitis, arthritis and cutaneous necrotizing vasculitis are associated with it [1].

Human leukocyte class II genes are more common in patients with Kikuchi disease, suggesting a genetic predisposition to the development of an autoimmune response.

It is diagnosed with a lymph node biopsy, with differential diagnosis including lymphoma, spread tuberculosis, sarcoidosis, viral lymphadenitis and systemic lupus erythematosus.

Treatment is symptomatic - analgesics, antipyretics, NSAIDs and corticosteroids in more severe cases.

## CASE PRESENTATION

A 57-year-old man enters our clinic on the occurrence of a neck tumor on the left, near the lockable place of m. sternocleidomastoid eussinistra, redness and severe local soreness. He was given a TAB a few days ago at another health care facility, and as a result the bloating increased and the pain intensified. Everything begins 4 months ago with persistent coughing and sputum, as the nadynamy, dizziness and consuming syndrome - about 10 kg in a few weeks. He reports night sweats but does not report a high fever. During this time, 3 X-rays of the lung were made without any deviations. He has been treated with symptomatic remedies - cough syrups, vitamins and anti-inflammatory drugs.

### The blood counts

Hemoglobin (HGB) - 103.0; Erythrocytes (RBC) - 4.48; Hematocrit (HCT) - 0.349; Leukocytes (WBC) - 7.75; Platelets (PLT) - 497.0; IG% - 0.3; NEUT% 73.9; LYMPH% - 19.5; MONO% - 6.2; EO% - 0.1; BA% - 0.3; NRBC% - 0.0; IG - 0.02; NEUT - 5.73; LYMPH - 1.51; MONO - 0.48; EO - 0.01; BA - 0.02; NRBC - 0.0; ESE - 82; CRP - 42.4; Aspartate aminotransferase (ASAT) - serum - 14.0; Alanine aminotransferase (ALAT) - serum - 16.0; Gamma glutamyl transferase (GGT) - serum - 48.0;

## Treatment

Cut along the lateral edge of m. sternocleidomastoid eussinistra, cut platyma and partially m. sternocleidomastoideus. A 50/45 mm package of lymph nodes with abscess and decay has been reached. Radical removal of the tumor formation was carried out. The specimen is sent for histological and microbiological testing.

## Result of histological examination

Lymphatic tissue fragments with a completely deleted structure represented by centrally located neutrophils surrounded by palisade histiocytes, groups of nodule-forming histiocytes, extensive necrosis zones with neutrophils and nuclear fragments, foam cell groups, single giant multi-core "foreign body" cells and keratin materials (Figure1,2).

## Immunohistochemistry examination

Few CD20 positive cells

Expressed expression of CD68 by cells that are a predominant cell population (Figure 3)

Moderate expression of CD3 positive cells (Figure 4)

## Result of microbiological study

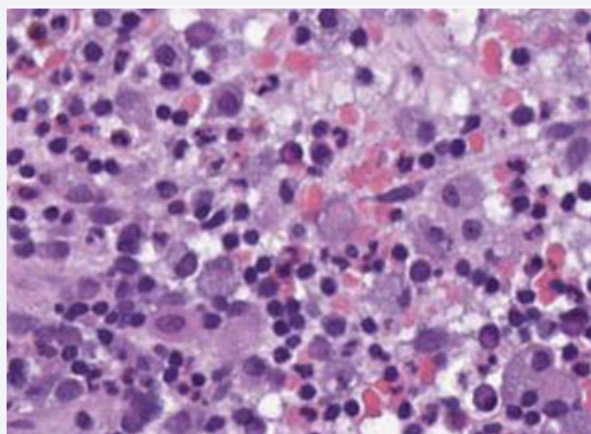
Enterococcus faecalis

## Outcome and follow up

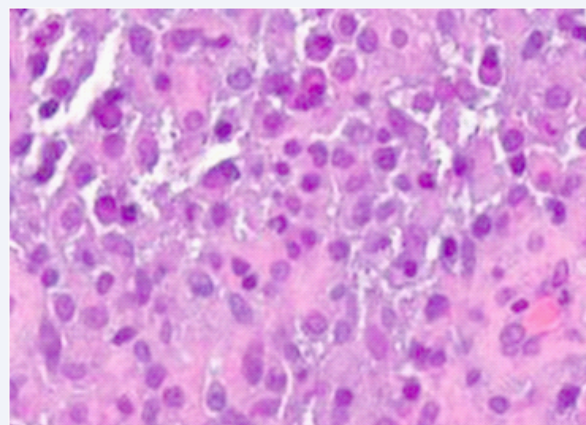
Complete recovery of the patient after the operation and full recovery after 6 weeks of follow-up. During this period, it was conservatively treated with antibiotics - Ciprofloxacin and Moloxin (Moxifloxacin), the swelling disappeared, almost recovered its kilograms from the time before the onset of the disease.

## DISCUSSION

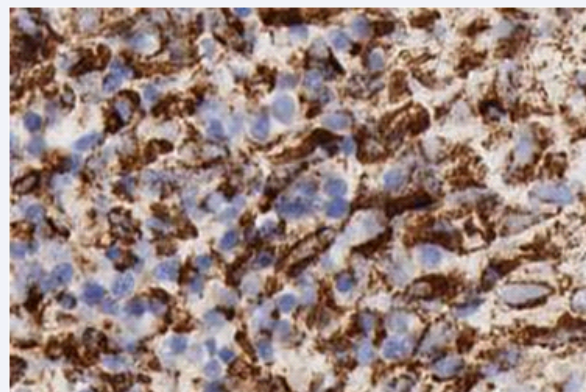
Kikuchi's disease is a very rare disease, mainly seen in Japan. Isolated cases are reported in North America, Europe, Asia and New Zealand. This is a major disease of young adults (20-30



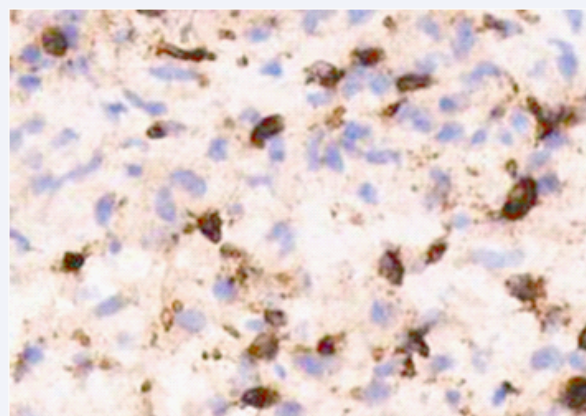
**Figure 1** Lymphatic tissue fragments with a completely deleted structure-I.



**Figure 2** Lymphatic tissue fragments with a completely deleted structure-II.



**Figure 3** Expression of CD68 by cells that are a predominant cell population.



**Figure 4** Moderate expression of CD3 positive cells.

years), with a slight prevalence among women. The cause of this disease is unknown, although infectious agents and autoimmune conditions are suggested. The nature of the disease is benign and self-limiting. The size of the lymph nodes is normalized for several weeks to six months. The probability of relapse is about 3%. Death from Kikuchi disease is extremely rare and is usually due to liver, respiratory, or heart failure.

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