Rare disease

Kikuchi—Fujimoto disease: a rare presentation of a groin lump

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Summary

Lumps in the groin frequently present to the accident and emergency department and can relate to a number of diseases that require different management. Kikuchi’s disease, first described in Japan in 1972 is a form of histiocytic necrotising lymphadenitis. It was discovered as a result of patients who were previously diagnosed with lymphoma but then recovered too quickly for it to be lymphoma. There appears to be no association with other pathologies but it remains important to exclude any autoimmune diseases and other causes of lymphadenopathy. We present a single rare case of a 39-year-old Caucasian gentleman who presented with a tender right inguinal groin lump.

BACKGROUND

Lumps in the groin frequently present to the accident and emergency department and can relate to a number of diseases that require different management. Kikuchi’s disease, first described in Japan in 1972 is a form of histiocytic necrotising lymphadenitis. It was discovered as a result of patients who were previously diagnosed with lymphoma but then recovered too quickly for it to be lymphoma.

There appears to be no association with other pathologies but it remains important to exclude any autoimmune diseases and other causes of lymphadenopathy.

We present a single rare case of a 39 year-old Caucasian gentleman who presented with a tender right inguinal groin lump.

CASE PRESENTATION

The patient, a 39-year-old Caucasian gentleman was referred to the on-call surgical team by his general practitioner for a 3-day history of constant dull ache and a lump in his right groin. Prior to that, he had been generally unwell for a few days with headaches, anorexia and generalised malaise. There had been no abnormal bowel or urinary symptoms, nights sweats and his weight had been constant. The patient was otherwise fit and well with no relevant drug or family history. He had a 10-pack-year smoking history, drank minimal alcohol and had travelled to Mallorca a month before.

At the time of admission, he was afebrile and haemodynamically stable. Examination revealed a small and firm grape-sized, tender lump in the right groin that was firm, immobile and without a cough impulse. He was also noted to have bilateral axillary lymphadenopathy but otherwise, unremarkable systemic findings.

Baseline investigations revealed a mildly raised CRP at 36.5 mg/l but otherwise unremarkable haematology, biochemistry and clotting profile (table 1). The patient progressively became pyrexial over the next 24 hours,

reaching temperatures of 38.9°C, however remained systemically stable. Blood cultures were preformed and showed no growth. To investigate lymphoma and tuberculosis (TB) a CT scan of his chest, abdomen and pelvis was performed (figure 1). This showed enlarged right inguinal (14 mm), external iliac (12 mm) and common iliac (12 mm) lymph nodes along with subcentimeter-sized axillary and aortocaval nodes and borderline splenomegaly. The patient was then started on antibiotics.

The patient subsequently underwent an excision biopsy of a right inguinal lymph node under general anaesthetic. As his fever had settled, he was discharged after 4 days of inpatient admission with a view for an outpatient appointment with the haematologist. Further blood tests revealed a normal serum protein electrophoresis, Immunoglobulins and antinuclear antibodies. This along with a histological report of ‘multiple collections of histiocytic cells with prominent apoptosis within nodal parenchyma’ was consistent with a diagnosis of Kikuchi’s lymphadenitis.

Table 1

	On admission	Day 1	Day 2	Day 3	Day 4
Haemoglobin (g/dl)	14.5	16.0	14.9	14.6	13.2
White cell count (10 ⁹ /l)	10.0	11.5	11.1	10.0	10.6
Platelets (10 ⁹ /l)	186	179	178	169	173
Total bilirubin (μmol/l)	Haemolysed	–	10	–	–
Total protein (g/l)	69	–	66	–	–
Albumin (g/l)	41	–	39	–	–
ALP (U/l)	72	–	68	–	–
ALT (IU/l)	Haemolysed	–	21	–	–
C reactive protein (mg/l)	36.5	60.6	89.0	83.7	98.9
Sodium (mmol/l)	137	139	135	137	136
Potassium (mmol/l)	Haemolysed	4.3	4.3	4.5	4.7
Creatinine (μmol/l)	73	88	81	86	80
Prothrombin Time (s)	12	–	13	–	–
International normalized ratio	1.0	–	1.1	–	–

Figure 1 CT scan showing a 14 mm inguinal lymph node.

DISCUSSION

Kikuchi's disease is a histopathological diagnosis characterised by histiocytic necrotising lymphadenitis (figure 2). Typically it is found among young Asian women, a ratio of 4:1 (female:male)¹ with most cases being under the age of 30. Classically the disease is limited to the head and neck region presenting with tender cervical lymphadenopathy in 70–90% of cases, and fevers.² However,

Figure 2 The microscopic view of histiocytic necrotising lymphadenitis.

other symptoms such as night sweats, weight loss and nausea³ are not uncommon and will often favour other important diagnoses, for example, lymphoma, TB and anal cancers. Other regions in which enlarged lymph nodes have been reported are axillary, supraclavicular, peripancreatic, retroperitoneal and inguinal.

The differential diagnosis for the case reported would include, cancers (lymphoma, anal or testicular), TB, hernia, benign cyst, abscess, lipoma, infections in the lower limbs or pelvic region and sexually transmitted diseases.

The disease has an association with SLE⁴ although no cause for the condition is known making it a tough diagnosis. As demonstrated by the above case the only way to confirm is to perform a biopsy.

Although a rare condition Kikuchi's lymphadenitis is an important differential in the management of lumps in the groin. The disease is self-limiting and treatment is symptomatic. The patient can therefore be assured there are no long-term sequelae.

Learning points

- Kikuchi's lymphadenitis is a diagnosis that can only be made by biopsy and histology findings.
- Patients presenting with groin lumps, fevers, night sweats and weight loss should always be investigated for sinister causes, for example, lymphoma, tuberculosis and anal and testicular cancers.
- Kikuchi's lymphadenitis is self-limiting and patients can expect a full recovery.

Competing interests None.

Patient consent Obtained.

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