中文題目：以急性腎損傷為初始表現之低惡性度濾泡型淋巴癌-病例報告

英文題目：Acute kidney injury as the initial presentation of low grade follicular lymphoma with renal involvement: A case report

作　　者：蕭秋穎[1], 黃筠婷[1,2], 甘偉志[1,2], 王憲奕[1,2], 簡志強[1,2]

服務單位：[1]奇美醫院內科部, [2]奇美醫院腎臟科

Introduction:

Follicular lymphoma (FL) is the second most common subtype of non-Hodgkin lymphoma (NHL) and is the most common of the clinically indolent NHLs. Involvement of organs other than the lymphatic organs or bone marrow is uncommon. Here, we present a patient in the setting of newly-diagnosed low grade follicular lymphoma with extensive nodal, bone marrow and renal involvement.

Case presentation:

A 75-year-old man without known systemic disease initially presented to local hospital with acute urinary retention and dysuria. He was then referred to our facility because of acute kidney injury with bilateral hydronephrosis, suspected prostatic cancer related obstructive nephropathy. There was no fever, dyspnea, night sweats, weight loss, abdominal pain, hematuria, flank pain, or lower limbs edema. On examination, he had anemia (Hb: 6.9 g/dL; 13.5-17.5), thrombocytopenia (PLT: 118 x10 3/μL; 150-400), deranged renal function (BUN: 120 mg/dL; 6-20; Cr: 14.24mg/dL; 0.72-1.25), hyperkalemia (5.17 mmol/L; 3.5-5.0), hyperphosphatemia (6.3 mg/dL; 2.7-4.5) and metabolic acidosis (bicarbonate 16.1mmol/L; 24-28). In urine routine analysis, proteinuria and non-dysmorphic red blood cells were present. Abdominal sonography disclosed peri-abdominal aorta, aorto-cava, peri-ureter bulky lymph nodes with mass effect resulting in bilateral severe hydronephrosis. Abdominal magnetic resonance imaging (MRI) depicted a huge confluent retroperitoneal mass, multiple enlarged lymph nodes in the bilateral retrocrural, hepatoduodenal ligament, bilateral common iliac, right external iliac, left inguinal regions, and hypovascular lesions in both kidneys, and lymphoma with kidney involvement was suspected. In chest computerized tomography (CT), atypical lymph nodes of mediastinum, axillary, supraclavicular, cardiophrenic, hepatoduodenal and retrocrus areas were found. In positron emission tomography (PET), increased F-2-fluoro-2-deoxy-D-glucose (FDG) uptake in lymph nodes on both sides of the diaphragm and bilateral kidneys were detected. The urine cytology was negative for high grade urothelial carcinoma. Sono-guided biopsy of the paraaortic bulky lymph node was performed. The histology demonstrated atypical small lymphocytes with condensed chromatin and irregular nuclear contours in a nodular pattern. Immunohistochemically, these atypical lymphocytes express CD10, CD20, bcl-2, and bcl-6, but not CD3 or cyclin D1. CD21 stain highlights the follicular dendritic meshworks. The proliferation index by Ki-67 is low. IGH/BCL2 reciprocal translocation was detected by Vysis dual color dual fusion probe. A low-grade follicular lymphoma was diagnosed. Bone marrow biopsy was also done for staging, which revealed marrow involvement by low grade follicular lymphoma. Bilateral percutaneous nephrostomy were placed for upper urinary diversion. We consulted the

oncologist, and adjuvant chemoimmunotherapy with 6 cycles of Bendamustine plus Ritaximab (BR) was suggested for his advanced disease stage (Lugano classification IV). His renal function got gradually improved after first cycle of chemotherapy (Cr: 14.24→ 8.05 mg/dL; BUN: 120→85mg/dL). The patient is still currently undergoing subsequent chemotherapy and has regular follow-up at our outpatient clinic.

Discussion:

Follicular lymphoma (FL) is the second most common type of non-Hodgkin lymphoma (NHL) and accounts for almost 30% of all lymphomas. It is a slow-growing B cell lymphoproliferative disorder with a favorable prognosis. FL typically presents with generalized painless lymphadenopathy. Clinically, most patients have an advanced-stage disease, and only 15-20% are in stages I or II at the time of diagnosis. Renal involvement with lymphoma occurs commonly with high grade lymphomas, most of them of B-cell origin. Follicular lymphoma affecting organs other than those in the lymphatic system or the bone morrow is rare. Sometimes, large tumors may form in the abdomen. When follicular lymphoma affects the bone marrow or the spleen, it can lead to low levels of the three main blood cell types: red blood cells, white blood cells, and platelets, called cytopenia. Stage III and IV FL are not curable with conventional treatment. The major indication for treatment is alleviation of symptoms and most patients with asymptomatic disease may defer therapy. Immunotherapy with an anti-CD20 monoclonal antibody is a key component of the treatment of patients with symptomatic FL.

Conclusion:

Though FL is a indolent NHL, most patients have an advanced-stage disease at the time of diagnosis. Treatment for all forms of lymphoma-related kidney injury focuses on therapy for the underlying malignancy.