

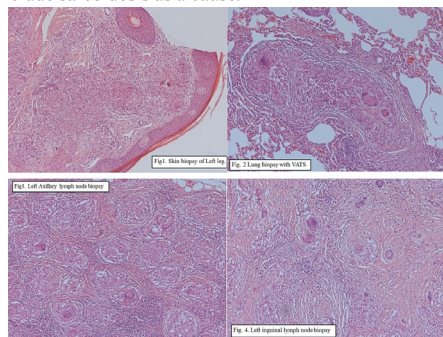
Sarcoidosis presenting as recurrent urolithiasis with renal failure, mimicked for lymphoma

가톨릭중앙의료원 여의도성모병원 내과

*김일수, 전영우

Case report: A 41-year-old man referred with recurrent urolithiasis for 3 years. At admission, physical exam revealed crackles at lower lung fields, skin nodules on the whole body. His blood tests showed an increased level of serum creatinine (3.37mg/dl) and calcium (11.8mg/dl). Also spirometry declined: forced expiratory volume in one second 3.10L (72% of predicted), forced vital capacity 3.93L (74% of predicted). The chest x-ray showed enlarged both hilar lymphadenopathy (LAP) and parenchymal infiltration of lungs. The electrocardiogram and echocardiogram showed sinus pause, moderate left ventricular hypertrophy with mild left atrial enlargement and basal to mid inferior and septal wall dyskinesia. The computerized tomography (CT) showed not only the left ureter stone but extensive LAP in cervix, hilum, retroperitoneum, pelvic walls and both inguinal area with numerous lung nodules. Under the impression of lymphoma, a whole-body 18-fluorodeoxyglucose positron emission tomography (18F-FDG PET) CT scan was done. It was noted metabolic hot uptakes of both supraclavicular, axillary, mediastinal, pulmonary hilar, retroperitoneal, both inguinal lymph nodes and hepatosplenomegaly with focal nodular uptake. Multiple biopsies at the skin, bone marrow, inguinal, mediastinal, axillary lymph nodes, and wedged lung resection revealed chronic granulomatous inflammation with multinucleated giant cells. (Image 1) Further exclusion studies were negative. Finally, sarcoidosis was diagnosed with pathologic studies, PET, spirometry, LAP, urolithiasis. Steroid pulse therapy was given, and the rapid improvement of creatinine (1.5mg/dL) was noted.

Discussion: Renal involvement in sarcoidosis is rare; the incidence in the Western society ranges from 0.1 to 7%. In our case, in addition to the large renal and ureteric calculi, there were pronounced tubular, vascular, and focal glomerular calcification. Our case shows that ureteronephric stones resulting in renal failure could be the initial manifestation of sarcoidosis. Hypercalcemia in a patient with recurrent nephrolithiasis, nephrocalcinosis, and renal failure can't exclude sarcoidosis as a cause.



Organ	Finding	Probability (WASOG)	Probability (ACCESS)
Lung	Biopsy confirm	Biopsy confirm	Biopsy confirm
Skin	Biopsy confirm	Biopsy confirm	Biopsy confirm
Liver	Nodular uptake at PET	At Least Probable	Probable
Eye	-	-	-
Spleen	Nodular uptake at PET	At Least Probable	Probable
Salivary gland	-	-	-
ENT	-	-	-
Calcium-VitD	Nephrolithiasis, urolithiasis	High Probable	Definite
Bone-Joint	-	-	-
Bone Marrow	Biopsy confirm	Biopsy confirm	Biopsy confirm
Muscle	-	-	-
Extra-Thoracic LN	LAP	At Least Probable	Probable
Kidney	Renal failure with Tx. response	At Least Probable	Definite
Nervous system	-	-	-
Cardiac	Sinus node arrest	Possible	Definite
Other organs	-	-	-