

PP-088

## Systemic lupus erythematosus (SLE) complicated by renal tubular acidosis (RTA) and urolithiasis

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**Introduction:** Kidney stones are a rare complication of SLE; it's due commonly to metabolic acidosis, however others factors can induce this complication and found by chemical analysis of stones.

**Material and Method:** During the period from January 1975 to October 2008 we analysis 274 cases of lupus nephritis; only one patient had urolithiasis.

**Case report:** A 21 years-old women was admitted for lupus nephritis, diagnostic criterions for SLE were: malar rash, serositis, lupus nephritis with nephrotic syndrome (kidney biopsy showed: proliferative lupus nephritis associated with tubulointerstitial lesions) and immunological disorders including elevated anti-double-stranded DNA levels, homogeneous ANA patterns=1/1600. The patient was treated by corticosteroids and cyclophosphamide with a complete remission of nephrotic syndrome.

7 years later, she developed renal colic and she expelled 8 renal stones in 3 year.

Laboratory data showed: hypokalaemia (K=3.3mmol/l), metabolic acidosis (HCO<sub>3</sub>=18mmol/l), hyperchloraemia (106mmol/l), normal renal function, serum Calcium=2.3mmol/l, uricemia =598mmol/l, serum parathyroid hormone (PTH) = 28pg/ml.

Urinary analysis showed: calcium=2.6mmol/24h, phosphate=18.10mmol/24h, elevated uric acid, hyperoxaluria, hypocitraturie, and urinary acidosis. Urine culture was negative.

Chemical analysis of stone showed state IIb and IVa with crystals of whewellites.

Renal Ultrasonography revealed non obstructive urolithiasis in the left kidney.

The patient was treated with high fluid intake, urine alkalization and poor oxalate diet. Follow up period was 24 months and our patient hadn't stones recurrence.

**Discussion:** Our patient had dRTA with renal calculi classed IVa, she had others lithogenic factors; hyperoxaluria, elevated urinary uric acid, hypocitraturie and urinary acidosis leading to formation stone IIb.

**Conclusion:** The systematic search for another lithogenic factors is necessary for a better treatment.