

V Edition of the Clinical Cases Contest on
non-surgical clinical management of Kidney Stones
Official template

Title: CHEMOLISIS IN ELDERLY AND RENAL FAILURE PATIENT

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Key words (3 to 6): RENAL FAILURE, URIC ACID STONE, ELDERLY

- 1. Abstract (no longer than 150 words).** We present the case of 91 years old patient with personal story of frequents renal colic pain and spontaneous expulsion of lithiasis, diagnosed with multiple left ureteral and renal obstructive stones compatible with uric acid composition. Was revealed that the patient also suffer chronic kidney failure, with creatinine clearance of 33 ml per min and pottasium level in 5.3 mEq/L. We proposed chemolysis with Lit-Control pH Up 2 tablets twice a day and sodium bicarbonate 500 mg per day, with complete dissolution of all the lithiasis in 3 months.
- 2. Introduction.** L.M.C is a 91 years old male patient that consult for persistant left renal colic pain, with no fever, hematuria or other symptoms. He had suffered this pain in other times, always resulting in the expulsion of lithiasis.
- 3. Clinical Case description**
 - a. Patient information / Medical records**
 - Dyslipidemia
 - Esophageal reflux and chronic gastritis for H.pylori
 - Renal colics
 - b. Diagnostic support studies and results**

- We performed X-ray, in which we do not observed urolithiasis, an ultrasonography, with the results of left kidney hydronefrosis and pelvic stone. After that, we performed a CT-scan, observing one left pelvic renal and obstructive stone of 15 mm and, at least, 3 lithiasis in distal ureter, also obstructive, of 25 mm of length. All the stones were 450-500 HU aprox.

- Blood analysis: uric acid 7.4 mg/dl, creatinine 1.7 mg/dl, K 5.3 mEq/l, urea 73 mg/dl, Creatinine clearance 33 ml/min. Blood count was normal.

- Urine analysis: pH 5.5, negative culture.

c. Diagnosis LEFT KIDNEY AND URETERAL OBSTRUCTIVES ACID URIC STONES.

d. Treatment

- Lit control pH Up 2 tablets twice a day

- Sodium bicarbonate 500 mg once a day

- Low purines diet

- Alopurinol 100 mg once a day

- Increase fluids intakes.

e. Evolution and progress

After 3 months of treatment, we performed a CT-scan, with the results of no stones in urinary systems. The blood analysis were similar than the priors of treatment, except level of uric acid, that decreased lightly. We maintained Lit control 1 tablet twice a day and dietary advices.

f. Clinical results

We completely solved the obstruction with chemolysis in a safety way, with no increase in pottasium levels and really well tolerated.

4. Discussion

The use of chemolysis with potasium citrate in the treatment of uric acid stones is well known, but could be limited by oral tolerance and potential increase of pottasium level in patients with renal failure. In this type of patients probably we should perform surgery in order to resolve the acid uric lithiasis.

5. Conclusions and recommendations

The use of Lit-Control pH Up would be useful in renal failure patients, also safe in elderly ages.

6. Bibliographic references (* of special interest, ** of extraordinary interest)