

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

Title: The power of dietary supplements and urinary pH regulation in the treatment of kidney lithiasis.

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1. Abstract

Objective: To evaluate the effectiveness of treatment with Lit-Control pH up Devicare in reducing uric acid kidney stones and normalizing urinary pH in a patient with left renal colic.

Method: Descriptive study of a patient with uric acid kidney stones diagnosed through abdominal CT scan and urine analysis, with follow-up at 6 months.

Results: After 6 months, a significant reduction in the size of the kidney stones was observed (from 6-7 mm to 2 mm), and urinary pH was normalized. The patient remained asymptomatic during this period.

Conclusions: Treatment with Lit-Control pH up Devicare was effective in reducing kidney stone size and normalizing urinary pH, with favorable results and no new episodes of renal colic. The treatment was adjusted to maintain long-term control.

2. Introduction

Kidney stones are a common condition affecting a wide population and are characterized by the formation of lithiasis in the urinary system. Uric acid stones, in particular, are associated with a low urinary pH, which promotes their formation, making the management of these stones ideally involve

both dissolution and urinary pH regulation to prevent recurrence. This clinical case of a patient with uric acid renal lithiasis was successfully managed conservatively with oral treatment, achieving proper correction of urinary pH and reducing the likelihood of new stone formation.

3. Clinical Case Description

a. Patient Information / Medical Records

56-year-old woman presenting with persistent left renal fossa pain over the past year. Relevant personal medical history includes hypertension well-controlled with ACE inhibitors.

b. Diagnostic Support Studies and Results

A CT scan was performed, revealing the presence of millimetric stones measuring 6-7 mm in the lower calyx of the left kidney. A mild dilatation of the renal collecting system was also noted, classified as grade II. Laboratory tests showed a urinary pH of 5, with abundant uric acid crystals, suggesting an acidic environment conducive to stone formation.

c. Diagnosis

The definitive diagnosis was uncomplicated left uric acid renal lithiasis, with mild dilatation of the ipsilateral renal collecting system.

d. Treatment

Treatment was initiated with Lit-Control pH up Devicare, a dietary supplement designed to raise urinary pH and facilitate the dissolution of uric acid stones. The treatment also included dietary recommendations to decrease the likelihood of stone formation.

e. Evolution and Progress

Six months into treatment, a new imaging study (CT) was performed, showing significant reduction in stone size. The largest stone decreased from 7mm to 2mm. Additionally, urinary pH had normalized to 6, indicating effective regulation. The patient remained asymptomatic between follow-up visits and did not experience pain or complications.

f. Clinical Results:

The patient remained asymptomatic during follow-up, indicating a favorable response to treatment. It is decided to continue with the same treatment, Lit-Control pH up and to finish optimizing the control of urinary pH, Lit-Control pH Balance Devicare is introduced alternately after observing easy pH variability, trying to avoid an excessive rise in pH, keeping it in the range from 5.5 to 6.2 which reduces the risk of stone recurrence. The patient was scheduled for a follow-up in the coming months.

4. Discussion

Uric acid kidney stones are a common complication, representing around 5-10% of all kidney stones and are particularly diagnosed in patients with low urinary pH. This case emphasizes the importance of proper assessment of urinary pH and the presence of uric acid crystals in the urine. Treatment with Lit-Control pH up, which helps raise urinary pH, has proven effective in dissolving uric acid stones, as seen in the patient presented. Normalizing urinary pH not only facilitates the dissolution of existing stones but also prevents the formation of new ones. Additionally, it is important to emphasize the role

of continuous monitoring with frequent checks and appropriate treatment adjustments to ensure proper pH regulation and prevent potential future recurrences.

5. Conclusions and Recommendations

The treatment of uric acid renal lithiasis should be carried out with a comprehensive patient management approach, starting by avoiding medications that can increase purine levels and promoting proper dietary habits. Furthermore, the beneficial effects of dietary supplements for both stone dissolution and urinary pH regulation have been demonstrated. In this case, the use of Lit-Control pH up led to significant clinical improvement, both in stone reduction and normalization of urinary pH in a reasonable time. Periodic monitoring of urinary pH along with imaging follow-ups is recommended to evaluate treatment efficacy and adjust as needed for each patient. Patient education on dietary measures and the use of a new app, which all patients have access to as an incentive for self-monitoring, is also essential to help prevent future kidney stone recurrence.

6. Bibliographic References

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