

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

Title: Medical treatment of recurrent lithiasis in a patient with multiple previous interventions - Clinical Case

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Key words: Lithiasis, Conservative Management, Medical Therapy

1. Abstract

Complicated lithiasis presents significant challenges in medical and surgical management. This case discusses a 53-year-old male patient with a history of recurrent nephrolithiasis of calcium oxalate stones and several previous surgical interventions, treated effectively with Devicare products incorporated into their medical management plan. We achieved a notable improvement in stone management and patient comfort.

2. Introduction

Nephrolithiasis is a common urological condition characterized by the formation of stones in the urinary tract, which can lead to significant morbidity and chronic kidney disease if untreated. Complicated lithiasis often requires comprehensive management strategies beyond typical dietary and surgical interventions, which are effective but often carry risks and morbidity. Medications that regulate urinary pH and citrate levels have been shown to reduce stone formation. This case explores the use of Devicare's Lit-Control products in a patient with recurrent nephrolithiasis.

3. Clinical Case Description

A 53-year-old male patient with a history of recurrent nephrolithiasis of calcium oxalate stones. His history included two episodes of spontaneous stone passage, lithotripsy, several interventions including previous rigid ureteroscopy with laser lithotripsy and two bilateral ureterorenoscopy with laser lithotripsy.

a. Patient information / Medical records

Age: 53 years

Gender: Male

Medical History: Recurrent nephrolithiasis, Chronic Kidney Disease stage 2, hypertension

Surgical History: Lithotripsy, three rigid ureteroscopy with laser lithotripsy and two bilateral ureterorenoscopy with laser lithotripsy

Medications: Lisinopril

b. Diagnostic support studies and results

CT Urogram: Left kidney with multiple 6-8 mm calculi; no hydronephrosis and Right Kidney with 4-6 mm calculi; no hydronephrosis.

Serum Chemistry: Slightly elevated calcium (10.5 mg/dL).

Urinalysis: Crystals consistent with calcium oxalate stones.

c. Diagnosis

Recurrent calcium oxalate nephrolithiasis

d. Treatment

The patient was started on Lit-Control pH Balance, was advised to adhere to a low low-sodium diet and maintain adequate hydration.

e. Evolution and progress

After six months of therapy, repeat CT showed a reduction in stone size to 3-4 mm. At twelve months, no new stone formation was observed and a reduction of stone size was also observed.

f. Clinical results

Decrease in stone size and number at six months and one year.

No episodes of acute nephrolithiasis after one year.

4. Discussion

This case underscores the importance of medical therapy in nephrolithiasis, since non-surgical management remains crucial in patients who are poor surgical candidates or experience recurrent stones. Devicare's Lit-Control showed a significant reduction in stone burden in recurrent nephrolithiasis.

5. Conclusions and recommendations

For recurrent calcium oxalate stone formers, Lit-Control in combination with dietary and lifestyle interventions shows positive results in prevention and reduction of stone burden, reducing the need for surgical interventions and the incidence of acute nephrolithiasis. Further research into non-invasive treatments for stone prevention is warranted.

6. Bibliographic references

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