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## Introduction

For individuals with chronic pain, treatment options are often limited especially if the patient has chronic kidney disease. Commonly used medications, including non-steroidal anti-inflammatory drugs (NSAIDs) and acetaminophen are not without risk. The effects of NSAIDs on renal function are well documented including acute kidney injury (AKI), hypertension, edema, and hyperkalemia. Chronic use of acetaminophen increases the risk of developing chronic tubular-interstitial disease secondary to papillary necrosis. There are other possible, effective alternatives with minimal side effects and no reported adverse effect on kidney function. They should be considered in patients with both coexisting chronic pain and chronic kidney disease.

## Case Presentation(s)

We present a 90-year-old male with repeat of hypertension and gout who had been maintained on losartan and allopurinol dose based on renal function for several years. His baseline creatinine was 1.5 mg/dL. Despite being on these 2 medications, he still would experience intermittent gout flares. The patient was started on tart cherry extract twice daily the capsule form and he has not had a gout flare over the last several years.

We present a 72-year-old male with a history of stage 3 chronic kidney disease and significant osteoarthritis of his left knee. He is able to ambulate without assistance but has chronic pain in that area. Other past medical history includes nephrolithiasis and hypertension. His baseline creatinine is approximately 1.6 mg/dL. He was started on Turmeric 500 mg daily as well as a topical homeopathic product Arnica Montana 30X which was applied to his left knee twice daily. He reported an improvement in his pain levels, and noted being able to walk better within 3 weeks of initiating this regimen.



Turmeric (image on left) from the turmeric root is effective in the treatment of chronic pain.



Tart Cherry (image on right) is effective for treatment of chronic pain due to arthritis or gout.

## Conclusion

Turmeric has been found to be non inferior to NSAID with regards to pain control and it does not cause the renal dysfunction associated with NSAIDs. Arnica Montana is a homeopathic supplement that has been demonstrated to be an effective pain option for patients with both knee and hand osteoarthritis in a peer-reviewed study. Tart cherry extract has been demonstrated to reduce the frequency of gout flare ups as well as chronic pain induced by gout. None of these above-mentioned treatments have had a detrimental effect on the renal function of these patients. Their pain control and level of functioning have improved. We need to consider incorporation of these effective agents in our armamentarium for pain control in patients both with and without chronic kidney disease. Further research is needed regarding optimal dosing and duration.

## References

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