



Case Report

A CASE REPORT OF HERBAL MEDICINES AND NSAIDS: POTENTIAL FOR ADVERSE INTERACTION INDUCES EDEMATIC/ ANASARCA

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ABSTRACT

NSAIDs are anti-inflammatory agents which is the most used drug of class around worldwide. Herbal medicines are traditional drugs that are mostly used to cure diseases. When the combination of NSAIDs and herbal medicines causes the Edema condition in the patients particularly renal damaged patients to have to avoid this combination. Rakshakneegutika causes the edema condition and Licorice causes hypertension and hypokalemia condition.

Key words:

Herbal medicines, Edema, NSAIDs, Anasarca.

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INTRODUCTION

Long-term use of herbal medicine causes edematous conditions in the patient. After the use of ashwagandha, a kidney transplant patient develops acute rejection requiring a graft nephrectomy. In kidney biopsy reveals the severe mixed interstitial inflammatory infiltrate includes several plasma cells and eosinophils with mild interstitial fibrosis and prominent interstitial edema.¹ In 1946, Hypokalemia is a rare disorder induced by Licorice which was first described by Revers, A 65 years old female patient was previously controlled hypertension undergoing a licorice-induced hypertensive crisis. For six months of period, she took licorice granules then patients develops the following conditions sodium retention, edema, hypokalemia, metabolic alkalosis, and low plasma renin activity. Most case reports reveal the licorice causes arterial hypertension with long term use with symptoms of encephalopathy, edema, hypokalemia, arrhythmias, acute renal failure, weakness of the heart muscle and other muscles, and cardiomyopathy.^{2,3}

Non-steroidal anti-inflammatory drugs (NSAIDs), were prescribed by physicians as an analgesic, antipyretic and anti-inflammatory agents which is the most used drug of class around worldwide. That NSAID user has a high risk of kidney injury, renal risks from NSAIDs could be reversible.⁴ NSAIDs inhibits the cyclooxygenase culminates in a decrease in total perfusion and medullary influx deviation (decrease GFR) and water and sodium retention results in renal vasoconstriction and medullary ischemic causes acute kidney injury, chronic

effects can result in chronic kidney injury which leads to fluid retention causes edematous conditions.^{5,6}

CASE REPORT

A male patient was admitted to the male medicine ward in a governmental general hospital with the chief complaints of shortness of breath for 3 days, decreased urine output, and generalized anasarca condition for 1 week. He is a known case of hypertension for 20 years on the treatment of T. Amlodipine 5mg, and T. Atenolol 50mg. The patient was a non-smoker, a known alcoholic, and had an edematous condition. The patient has a habit of taking the herbal product (Rakshakneegutika shown in figure.3) and allopathy medicines for body pains then he gets anasarca /edema condition. (figure. 1&2)



Figure 1 Edematous condition in hand

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Figure 2 Edematic condition in leg



Figure 3 Herbal medicine used by the patient

Lab reports of patient hemoglobin – 8.7g/dl, Total count – 28,100 cell (N-92, L-5, M-2, E-1), platelets – 5.6 lakhs/cum, blood urea nitrogen – 46 mg/dl, serum creatinine – 1.6 mg/dl, total bilirubin – 0.9 mg/dl. The patient was diagnosed with Old CVA with a generalized anasarca condition. The treatment chart include the drugs of ceftriaxone 1gm IV, Inj. Lasix 60mg IV, Inj. Pantop 40mg IV, T. Ecosporin 75mg, T. Atorvastatin 25mg IV.

Outcomes

After suspecting the patient's condition and advise the ceftriaxone for controlling infection, and Inj. Lasix for reducing the edematic condition. After 2 weeks of treatment, the patient showed significant improvement in his condition and got discharged.

DISCUSSION

In both national health authorities and the general public traditional and herbal medicines, safety has become a major concern. Number of other reasons for increasing utilization of herbs for self-medication by patients or individuals, such as

1. Patients being uncomfortable about discussing their medical problems
2. Fear lack of confidentiality in health information,
3. Fear of possible misdiagnosis and wrong treatment by patients with non-specific symptoms
4. Lack of time to see a physician.⁷

Edemais associated with premenstrual syndrome (PMS) which is caused by Chinese spinach.⁸ After injection of carrageenan the rat's footpad became edemateous. At 4 hours Edema value of the injected footpad reached its peak. Edema and inhibition rate after the administration of CFA and Xuan-Ju agent,(aqueous extract of *Formica fusca*, *Herbaepimedii*, *Fructus cnidii*, and *Fructus lycii*).

Left hind paw and Edema value of the injected footpad increased and reached a peak at 12 days.^{9,10,11}

CONCLUSION

A combination of NSAIDs and herbal medicine causes the edematic or Anasarca condition in this patient. Mostly to avoid the herbal medicine use especially the combination of herbal medicine and allopathy medicines. Some treatment measures were discussed in this case report about the Edematic (anasarca) condition. This knowledge is helpful to identify and report these types of diseases.

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