



SINCE HERBAL MEDICATIONS ARE NATURAL, CAN THEY BE CONSIDERED COMPLETELY SAFE?

Anaesthesiology

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ABSTRACT

The herbal medications cannot be considered absolutely safe and the unregulated domestic use of herbal medications can have potential life threatening side effects. A 29 year old male presented in emergency department of PGIMS, Rohtak in an intubated status with pancreatitis with MODS. The main etiology was uncertain even till the end. This case report emphasizes on the need of the hour is to educate the common people regarding the safety of herbal medication. Herbal medication can lead to life threatening consequences if taken outside the permissible limits.

KEYWORDS

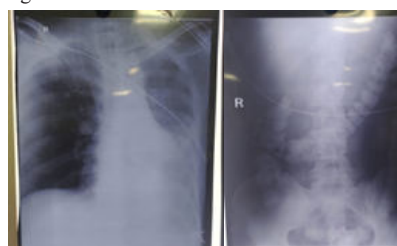
INTRODUCTION

Ayurveda is an ancient medical system that was written 2000 years ago in Sanskrit by hindu healers¹. Ayurveda uses amalgam of life style modifications and remedies for the treatment of various diseases². Many studies have been conducted time to time that have shown presence of toxic metals in various commonly used herbal medications³⁻⁴. The heavy metals like lead, arsenic, and mercury are usually used to enhance the potency of ayurvedic medications. Arsenic is being used as poison as well as for medical purpose. In ayurveda mineral drugs are known as "bhasmas" that are prepared after extensive purification of metals⁵. During traditional preparations these metals were purified after undergoing various cycles of cooling and heating. But in modern remedies the level of adulteration is excessive due to poor quality control.²

CASE REPORT

A 29 year old male presented to Pgims Emergency Department in intubated status with complain of high grade fever associated with altered sensorium and petechial rashes all over the body. Patient was initially managed at churamani hospital hisar and fortis shalimar bagh for same complains since 8 days. Patient was investigated outside NCCT whole Abdomen was suggestive of Subacute intestinal obstruction with dilated jejunum and proximal ileum post paralytic ileus at churamani hospital along with bilateral pleural effusion. In view of poor GCS patient was intubated at churamani hospital and was referred to fortis shalimar bagh. Patient was admitted in ICU at fortis. Covid 19 report was negative. Results of routine investigation revealed increased pt/inr, low hb(7), raised TLC, critical low platelet count 40000, deranged KFT (BUN 118 and creat 2.83) and LFT. CT Whole abdomen was done suggestive of enlarged liver, pancreas appeared acute interstitial edematous pancreatitis, spleen was also enlarged in size and kidneys were enlarged in size and appeared oedematous globular in morphology. mural thickening of ascending colon, distal ileum and caecum was seen. 2D ECHO revealed LA/LV were mildly dilated mild MR and mild TR was seen with severe global hypokinesia of LV with Ejection fraction of 30%. Bilateral Pleural effusion with adjacent atelectasis was seen. ground glass opacities with mild interlobular septal thickening was seen along with right lower lobe consolidation/collapse was seen. Patient developed hemodynamic instability and was taken on NOR-ADR and Dobutamine at fortis only. Patient was diagnosed as acute pancreatitis with AKI with septic shock with ARDS at fortis. 10 units of cryoprecipitate was transfused during course of hospital stay. In view of prolonged need of ventilator support tracheostomy was done and patient took LAMA to pgims Rohtak.

On Arrival At PGIMS patient was immediately admitted in modular ICU for ventilator support. Since the attendants of patient were not living with the patient therefore the exact etiology could not be understood for deterioration of the condition of patient. Patient was managed for acute pancreatitis along with lung protective ventilation at modular icu. Patient underwent 1 cycle of heparin free dialysis with 500 ml ultrafiltrate after nephrology opinion. All Cultures were non conclusive as well as no gall stone were seen on usg or ct abdomen. The etiology of the pancreatitis was not found. Supportive Treatment was provided for 6 days. Nor adr and dobutamine was gradually tapered and patient was finally extubated on day 7 of admission in pgims. On detailed history taking the patient informed that he had taken whole bottle of expired safi under peer pressure to treat his acne. On Retrospective analysis patient also revealed that he had severe pain abdomen for few hours before he had loss of consciousness. The levels of heavy metals could not be done as the patient presented to us at a very late stage.



chest xray of patient on day of admission Barium Enema



CECT Chest On DAY 1

DISCUSSION

The person who consume ayurvedic medications should be aware of the potential side effects of the drugs if taken outside permissible standards. The presence of dangerous levels of lead, mercury or

arsenic can cause life threatening side-effects as observed in this patient. Saffi according to the results of Health Canada is found to have shown presence of more than 40 times the maximum allowable limits of arsenic. They have also banned this medication in USA and Canada. The heavy metals accumulate in vital organs and children are particularly susceptible to heavy metal poisoning. In an research paper by Mikulski et al, the levels of lead, arsenic, mercury, silver and cadmium were found to exceed the recommended levels by thousand times emphasizing on further toxicological researches needing on herbal medications⁶. In a case report by Breeher et al, ayurvedic medication are responsible for lead toxicity as well in adults. Both allopathic and alternative medicine practitioners should consider potential contamination of and side effect of herbal medication⁷. Arsenic is capable of inducing oxidative stress leading to B-cell apoptosis in pancreas⁸ and pancreatitis-associated processes such as necrosis, apoptosis, inflammation, or duct obstruction can destroy the secretory parenchyma leading to acute pancreatitis⁹. The heavy metal poisoning is merely a diagnosis of exclusion in patients on ayurvedic medication. In our case report the patient had a fortune to get timely hospital admission and management, but most people taking lower doses of medications are not monitored for chronic side effects of these drugs. Therefore ayurvedic medications are not completely safe they need better regulatory monitoring on marketing of these drugs.

CONCLUSION

The Case Illustrated here questions the unregulated domestic use of herbal medications. The awareness regarding the possible side effects of these drugs should be displayed in better formats for herbal medications. The patient in this case has taken expired unsupervised ayurvedic medicine for treatment of acne that lead to pancreatitis and life threatening consequences on patients health. The diagnosis was made very late in this patient therefore any individual who present to ICU with atypical features should be evaluated for heavy metal poisoning or overdose initially only. Awareness through social media and telecommunication should be provided to avoid self medications and side effects of all ayurvedic medications.

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