



A RARE CASE REPORT OF ALCOHOL DEPENDENCE IN ALCOHOL WITHDRAWAL WITH DELIRIUM TREMENS WITH PELLAGRA

Psychiatry

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ABSTRACT

Pellagra is a disorder occurring due to niacin deficiency in body. Chronic intake and alcohol and being excessively dependant on corn in diet leads to pellagra. Here we present a rare case of a 39 year old male having the dermatological manifestations of pellagra presenting with Delirium Tremens and was taking flour corn as the principal item in diet.

KEYWORDS

Alcohol dependence, Corn Diet, Pellagra, Delirium tremens

INTRODUCTION:

Pellagra is a nutritional disorder caused by the deficiency of niacin and is characterized classically with three 3 Ds, namely dermatitis, diarrhea and dementia[1]. Excessive and chronic alcohol intake can induce pellagra due to reducing the absorption of niacin leading to pellagra[2]. The diet that mostly depends on soaked corn and also lead to pellagra[3]. Here we present a case of a 39 year old male with alcohol dependence on staple corn flour die diagnosed with pellagra relieved with multivitamin supplementation.

CASE REPORT:

A 39 year old male, farmer by profession, presented to us with complaints of a 4 day history of vomiting, and a 2 day history of altered sensorium, tremors and decreased sleep and appetite. He was a known case of alcohol dependence since 15 years with drinking about 180 ml of country liquor 2-3 times a week and since the past year had been steadily increasing the frequency to almost 5-6 times / week with his last drink 4 days ago.

There was no history of similar episodes in the past, seizures, urinary incontinence, head injury, any previous psychiatric illness. He had no history of any depressive / manic / OC features. No h/o hypertension, diabetes mellitus, epilepsy, Loss of consciousness, ENT infection, Tuberculosis, Asthma. He had no history of any previous hospitalization, no history of any medical or surgical co morbidities.

Physical examination revealed his vitals to be stable, his Random sugars was 160mg/dl with his last meal 10 hours ago and blackening and pigmentation over his toes, and dorsum of foot, an ulcer over his right sole below the toes, and on asking, he had a history of delayed wound healing.

Mental status examination revealed he was unkempt, untidy, disoriented, restless, and drowsy, picking up behaviour was present.

He was stabilized with IV fluids, IM Lorazepam, IV pantoprazole, IV ondansetron.

Inj TT and Inj Thiamine were given IM.

Once stable he was switched to T. Lorazepam 8-12 mg / day in divided doses.

Routine investigations for CBC, LFT, Electrolytes and RFT were sent. The next day, a surgical consultation was taken for the blackening and pigmentation since peripheral arterial disease was suspected.

Fasting and post prandial blood sugars were sent and arterial and venous colour Doppler was advised.

His fasting and post prandial sugars were normal and arterial colour Doppler reports were normal. His venous Doppler showed B/L sapheno-femoral and sapheno-popliteal incompetence.

A dermatological consultation was taken for the pigmentation and multiple studded scales over hyper pigmented well defined pattern present on nose hands, legs and neck were seen and a diagnosis of pellagra was made. On enquiring further a staple diet of corn flour was present in his history which further supports the diagnosis of pellagra. Multivitamin injections and Moisturizing cream were given twice a day. After 2 weeks of stay, he was discharged and advised for regular follow up and told to continue multivitamin tablets and moisturizing cream along with anticraving drugs.



AFTER 1 week



AFTER 2 weeks**DISCUSSION**

Pellagra was first described in 1735 by Don Gaspar Casal by the name 'mal de la rosa' because of the reddish rash that was found among the people of lower socio economic strata in Spain. Pellagra occurs as a result of deficiency of niacin (vitamin B3) or its precursor tryptophan[4] The recommended daily allowance of niacin is 15-20 mg. 60 mg of tryptophan is needed for 1mg of niacin [4]Primary pellagra occurs due to deficiency of niacin or tryptophan in diet. Secondary pellagra is due to interference with niacin or tryptophan metabolism. This occurs in chronic alcoholism. Lower standard of living, alcoholism and excessive intake of corn are the most common risk factors of pellagra[1,5].

Early dermatological lesions manifest as erythema of sun-exposed areas with vesiculation that leave areas of denuded epithelium healing with pigmentation of dusky brown colour.Exacerbation occurs on exposure to sun[6].In the later stages these lesions turn hyperkeratotic, dry, scaly, and pigmented, with a yellow brown hue. Healing occurs with desquamation of the center of the lesions and persistence of marginal erythema. Though pellagra can present on any site, the dorsum of the hands, feet, face, neck and arms are the usual sites of involvement.[6]

Coming to our case, the patient was a chronic alcoholic for last 15 years and he was also taking a staple diet of corn flour. Both of these are most likely reasons behind the manifestations of pellagra due to niacin deficiency. Besides the dermatological manifestation were also suggestive of pellagra. The patient was symptomatically much improved by treatment with multivitamin supplementation .

CONCLUSION

Cases reports of pellagra due to alcohol dependence and excessive consumption of corn is rare in the south western part of India where corn is not a staple diet. Proper identification and diagnosis of such features of pellagra will help in implementation of appropriate treatment plan while managing such patients.

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