A Reversible Case of Chronic Arsenicosis due to Homeopathy Medicine

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Sir,

A 44 year old lady, homemaker, residing in south 24 parganas district of West Bengal presented with generalised weakness, weight loss, intermittent diffuse pain abdomen, anorexia, nausea, off and on diarrhoea for eight months. She also noticed darkening of her complexion for six months. Since last 4 months, she had intermittent headache of varying duration, frequency and intensity with tingling and numbness of all four limbs. She was normotensive, non-diabetic without any other significant co-morbidities. She was a non-vegetarian without any history of substance abuse. Her past medical records revealed that she was a patient of chronic anxiety disorder for which she was treated by homeopathy medicine.

On clinical examination she was found to be thin built (BMI-21 kg / m²) with mild pallor, bilateral pitting pedal edema with stable vitals. There was diffuse hyperpigmentation of whole body with painless non-itchy brownish spotty rain drop like pigmentations over face, particularly forehead and also in trunk. There was also hyperpigmentation and hyperkeratosis of the palms but not of soles. Neurological examination showed (Figure 1) preserved higher mental function, bilateral papilledema with intact other cranial nerves. There was mild motor weakness in (Figure 2) both lower limbs, both proximal (power grade 4+) and distal accompanied by hypotonia without any motor weakness in upper limbs. There was distal sensory deficit in the form of glove and stocking hypoesthesia with reduced deep reflexes in all 4 limbs and bilateral flexor planter response. Gastrointestinal examination revealed non-tender enlarged liver with 16 cm span, mild splenomegaly and mild ascites. Other system examination were non-contributory.

Investigations showed mild microcytic hypochromic anaemia (Hb- 9.2 g/dl, MCV-78 fl, MCHC-31.3 g/dl), low serum iron (27.5 mcg/dl), low TIBC (84.4 mcg/dl), high serum ferritin (808.6 ng/ml), raised transaminases (AST- 40 IU/L, ALT- 98 IU/L), low serum total protein (4.6 g/dl), low serum albumin (1.9g/dl), globulin (2.7 g/dl) and raised alkaline phosphatase (789 IU/L).

All other haematological and biochemical reports are normal. Serological tests including HBsAg, anti HCV, HIV and VDRL were negative. Serum ceruloplasmin, tissue transglutaminase, autoimmune hepatitis profile (ANA, ASMA, LKM 1) were normal Hormonal profile including TSH (2.23 µIU/ml) and serum cortisol (18.77 µg/dl) were normal.

USG abdomen showed enlarged liver with altered echogenicity. Ascitic fluid examination revealed high SAAG ascites. Fundus photography was suggestive of papilledema with evidence of haemorrhage. MRI brain, MR angiography and MR venography of brain were normal. CSF study was within normal limit. Upper GI endoscopy with biopsy of second part of duodenum was suggestive of non-specific duodenitis. Nerve conduction velocity of all four limbs was suggestive of sensorimotor neuropathy.

Unexplained, apparently unrelated multi-system involvement including chronic diarrhoea, presence of liver disease, peripheral neuropathy, idiopathic intracranial hypertension (pseudotumor cerebri) and characteristic skin lesions suggested chronic arsenicosis. Arsenic level in hair was found to be 1.06 µg/g (N= 0.02-0.2 µg/g) and arsenic level in nail was 1.24 µg/g (N= 0.02-0.5 µg/g) with normal arsenic content (0.03 mg/l) of the drinking water of the locality.

History was revisited and thorough scrutiny of past medical records revealed that the patient was taking arsenicum
album for her anxiety depressive disorder for last one year. The drug was discontinued. Six months later the patient came back with disappearance of all skin lesions, reversal of features of neuropathy, subsidence of diarrhoea, marked improvement of papilledema and normalization of altered liver function along with disappearance of ascites.

Arsenic toxicity from improper use of homeopathy medicine is reported in literature. Pseudotumor cerebri due to arsenic therapy in acute promyelocytic leukemia is also reported. Learning point is that apparently harmless homeopathy medicine may cause multi-system involvement. It emphasizes the importance of drug history in clinical medicine. Reversal of symptoms and signs after drug withdrawal is the greatest proof and most rewarding.

**Conclusion**

Meticulous history taking and thorough scrutiny of past medical records is often helpful in reaching diagnosis to especially multisystem disorders. Many popular and herbal medications contain heavy metals which should be taken into consideration while taking drug history of the patient. Clinicians must consider these drugs apart from potable water as a potential source of arsenic poisoning.

**References**