ORIGINAL RESEARCH PAPER

Neurology

KEY WORDS: involuntary jerky movement; acute onset; gait instability; supportive care

AN INTERESTING CASE OF ASTASIA-ABASIA IN A YOUNG ADULT MALE WITH ACUTE ONSET GAIT DISTURBANCE

Dr Sagar Pethe* General Medicine Resident *Corresponding Author

Dr Varun Shetty HOU And Professor

ABSTRACT

Astasia-abasia is a functional gait disorder characterized by impaired standing and walking despite preserved motor strength and the absence of structural neurological disease. We report a case of a 21-year-old male presenting with acute onset involuntary jerky movements while walking, associated with tingling and numbness of the limbs for two days. Symptoms began following binge alcohol consumption in the setting of chronic alcohol, cigarette, and cannabis use. Neurological examination revealed increased tone and hyperreflexia with preserved power and intact cranial nerves. Gait examination demonstrated exaggerated swaying and inconsistent jerky movements that improved with distraction and supportive maneuvers. MRI brain, EMG-NCV studies, and routine laboratory investigations were normal except for vitamin D deficiency. After exclusion of organic causes, a diagnosis of astasia-abasia was made. The patient improved with reassurance, supportive care, and psychiatric management. Early recognition of functional gait disorders is essential to avoid unnecessary investigations and prevent prolonged disability.

INTRODUCTION:

Astasia-abasia is a rare functional gait disorder within the spectrum of functional neurological disorders (FND). It is characterized by inability or marked difficulty in standing and walking despite preserved motor strength and absence of structural neurological pathology. Patients often demonstrate bizarre, inconsistent gait patterns that may mimic cerebellar, vestibular, or extrapyramidal disorders. Diagnosis is primarily clinical and requires exclusion of organic causes along with identification of positive functional signs. Early recognition is essential to avoid unnecessary investigations and prolonged disability. We report a case of acute onset gait disturbance in a young male ultimately diagnosed as astasia-abasia.

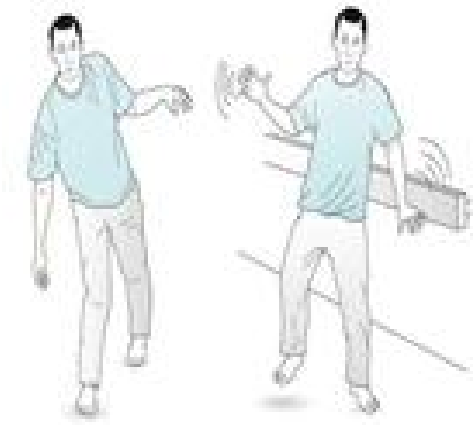

Figure 1: jerky involuntary movements

Sources: www.googleimages .com/ astasiaabasia

Table : Functional Neurological Disease:

Parameter	Reported Statistics
Estimated incidence of functional neurological disorder (FND)	10–22 per 100,000 population/year
Estimated prevalence of FND	80–140 per 100,000 population
Female predominance	60–80% of cases
Peak age of presentation	Late teens to late 30s
Psychiatric comorbidity	Present in up to 60–70% of cases
Misdiagnosis rate after expert evaluation	<5% in recent studies

Source: Stone J, Carson A, Duncan R, et al. Symptoms unexplained by organic disease in neurology outpatients: how often does the diagnosis change at follow-up? Brain. 2009;132:2878–2888.

CASE PRESENTATION:

A 21-year-old unmarried right-handed male, a first-year M.Com student from Badlapur, presented to the outpatient department of D.Y. Patil Hospital with complaints of involuntary jerky movements while walking for two days. Symptoms were acute in onset and associated with tingling and numbness in all limbs.

The patient reported binge alcohol consumption two days prior to onset of symptoms. He also had history of chronic alcohol use, cigarette smoking (2–3 cigarettes/day), and cannabis consumption.

There was no history of trauma, seizures, loss of consciousness, focal weakness, visual disturbances, bowel or bladder involvement. Past medical history was unremarkable.

On general examination, the patient was hemodynamically stable with normal pulse, blood pressure, and oxygen saturation. No pallor, icterus, cyanosis, clubbing, edema, or lymphadenopathy was noted

NEUROLOGICAL EXAMINATION:

Higher mental functions and cranial nerve examination were normal.

Motor examination revealed increased tone bilaterally in both upper and lower limbs with preserved muscle power. Deep tendon reflexes were exaggerated in all four limbs, while plantar reflexes were bilaterally flexor.

Cerebellar examination showed normal finger-to-nose and heel-to-shin testing with mild terminal tremor. Romberg test could not be performed due to imbalance.

Sensory examination revealed subjective tingling and numbness without objective sensory deficits.

Gait examination demonstrated involuntary jerky and inconsistent movements with exaggerated swaying while attempting to walk. Symptoms improved with distraction and supportive manoeuvres.

INVESTIGATIONS:

MRI brain and EMG-NCV studies were normal. Routine laboratory investigations, serum calcium, magnesium, and thyroid profile were within normal limits. Vitamin B12 level was 345 pg/mL, while vitamin D level was low at 13.7 ng/mL.

Psychiatric evaluation revealed anxiety-related symptoms.

MANAGEMENT:

After exclusion of organic neurological causes, a diagnosis of astasia-abasia was made.

The patient was managed with reassurance, supportive care, and psychiatric intervention. He was started on tablet escitalopram 5 mg, tablet etizolam 0.25 mg at night, and tablet olanzapine 2.5 mg at night. Tablet clonazepam 0.25 mg SOS was advised for anxiety symptoms.

Gradual improvement in gait and overall symptoms was observed during follow-up.

DISCUSSION:

Astasia-abasia is a functional gait disorder characterized by inability to stand or walk despite preserved coordination and motor strength. Patients typically exhibit dramatic and inconsistent gait abnormalities that do not conform to known neurological patterns.

In this case, increased tone and hyperreflexia initially raised suspicion for upper motor neuron pathology. However, normal neuroimaging and electrophysiological studies, preserved cerebellar function, and absence of objective neurological deficits argued against an organic etiology.

The presence of inconsistent gait abnormalities and improvement with distraction strongly supported a functional diagnosis. Recent binge alcohol intake and chronic substance use may have acted as precipitating factors, while anxiety likely contributed to symptom manifestation.

Diagnosis of astasia-abasia remains clinical and relies on exclusion of structural disease together with recognition of positive functional signs. Management includes reassurance, psychiatric support, physiotherapy, and rehabilitation. Early diagnosis is important to prevent unnecessary investigations, repeated hospital visits, and long-term disability.

CONCLUSION:

This case highlights the diagnostic challenges associated with functional neurological disorders presenting as acute gait disturbance. Recognition of positive clinical signs and careful exclusion of organic pathology are essential for accurate diagnosis of astasia-abasia.

Early multidisciplinary management can significantly improve outcomes, reduce healthcare burden, and prevent prolonged disability and physical deconditioning

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