

Case Report

A case of subacute cerebellar ataxia in a patient of prolonged Metronidazole abuse— an uncommon side effect of a commonly used antibiotic

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Aim

Rampant use metronidazole for various indications.
To highlight metronidazole induced cerebellar ataxia as an uncommon but potentially reversible condition.

Materials & Method

Detailed history, general as well as neurological examination, biochemical tests, imaging (MRI Brain) was done in the patient who was admitted in Department of Neurology, Medical College Kolkata.

Result

History

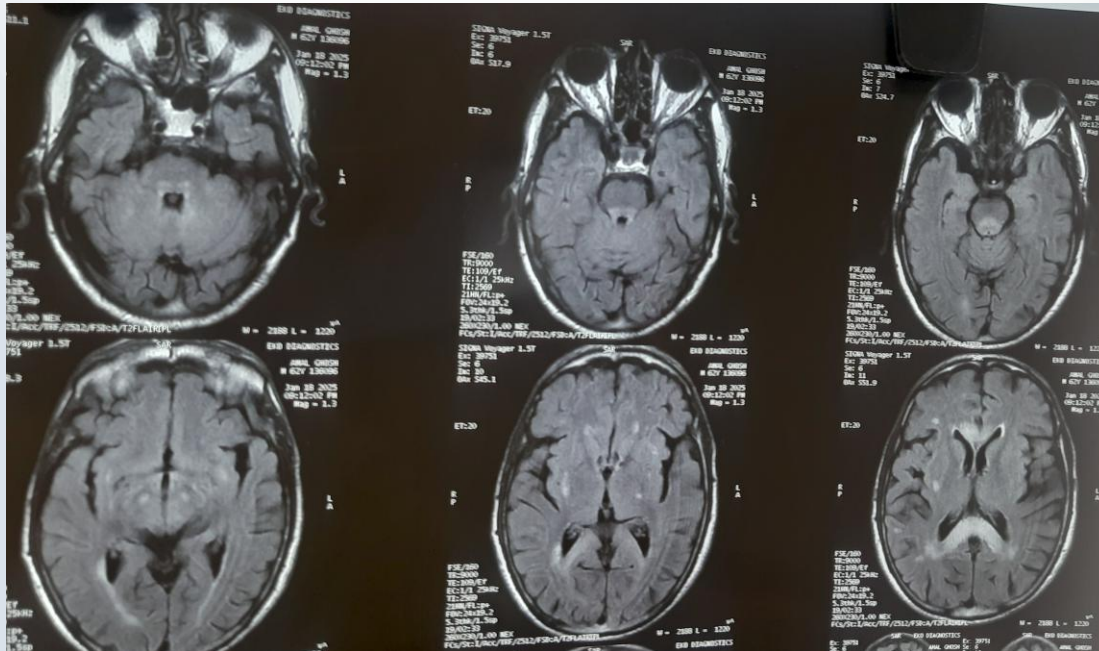
- 60 Y/M, smoker & alcoholic (last intake 2 yrs back)
- Non-HTN, Non-DM
- Subacute progressive gait ataxia (cerebellar origin)
- Slurring of speech
- No parkinsonism
- Limb ataxia (UL, LL)

- No cranio-bulbar symptoms, limb weakness, systemic features (weight loss, anorexia)
- H/o metronidazole intake for diarrhoea x 2 months (>40 g)

Examination

- General: Normal
- Cranial nerves: Normal, supranuclear gaze control intact
- Speech: Ataxic
- Tone & Power: Normal
- DTRs: Preserved (except absent ankle jerk B/L)

- Cerebellar signs:
 - Gaze-evoked nystagmus (horizontal, upgaze)
 - UL intentional tremor
 - Gait: Cannot walk unassisted
- Proximal wing-beating tremor



Investigations

- Blood parameters: Normal
- MRI Brain:
 - FLAIR hyperintense lesions → dentate nucleus, vestibular nucleus, pontine tegmentum, splenium
 - Diffusion restriction in splenium

Analysis

- We suspected cerebellar ataxia due to metronidazole toxicity as it involved the structures classically described in literature.
- We stopped metronidazole and after 7-10 days there was improvement of limb ataxia.
- After 4 weeks there was significant improvement of gait ataxia— patient became ambulatory.
- Significant resolution of FLAIR changes in repeat MRI brain.

Conclusion

- Metronidazole though widely used, can uncommonly cause reversible cerebellar toxicity.
- Careful drug history is essential in unexplained subacute ataxia, as it is potentially reversible.
- Awareness prevents unnecessary workup.

