# OROTRACHEAL INTUBATION IN A PATIENT WITH FOCAL EPILEPSY AND PNES

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## Objectives

This report aims to highlight the importance of prompt differential diagnosis between epileptic seizures and psychogenic non-epileptic seizures (PNES), in order to avoid unnecessary invasive treatments.

## Materials and Methods

The patient, followed at our Regional Epilepsy Center, was assessed from the moment of her admission to the Emergency Department, throughout her stay in the Intensive Care Unit and later during hospitalization in our Neurology Clinic. The case was reconstructed based on clinical documentation, EEG and MRI, with a 6-month follow-up.

## Case Report

### Remote pathological history

- Female
- 24 years old
- Pharmacoresistant symptomatic focal epilepsy
- Cerebral malformation:
  - Left lobar megalencephaly
  - Ipsilateral subcortical heterotopia
  - Polymicrogyria
- Moderate cognitive disability
- Paroxysmal supraventricular tachycardia
- Homozygous mutation of the MTHFR gene
- Home Therapy:
  - Lamotrigine 150 mg/day
  - Perampanel 8 mg/day

### Diagnostic work-up

**Brain MRI** and **EEG** were performed during the therapeutic window.

On March 16, 2024, she was transferred to our UOSD to continue further diagnostic evaluations and appropriate care.

- Hematochemical tests: LAMOTRIGINE 7.0 µg/mL [3.0 - 15.0]
- Neurological Objective Examination: normal
- During the hospitalization at our clinic, no seizures were observed.

### Recent medical history

March 13, 2024

Recurrent paroxysmal episodes with predominantly motor semiology

Emergency medical treatment administered:

- Diazepam 10 mg ev
- Levetiracetam 1 g ev
- Propofol

Emergency investigations performed:

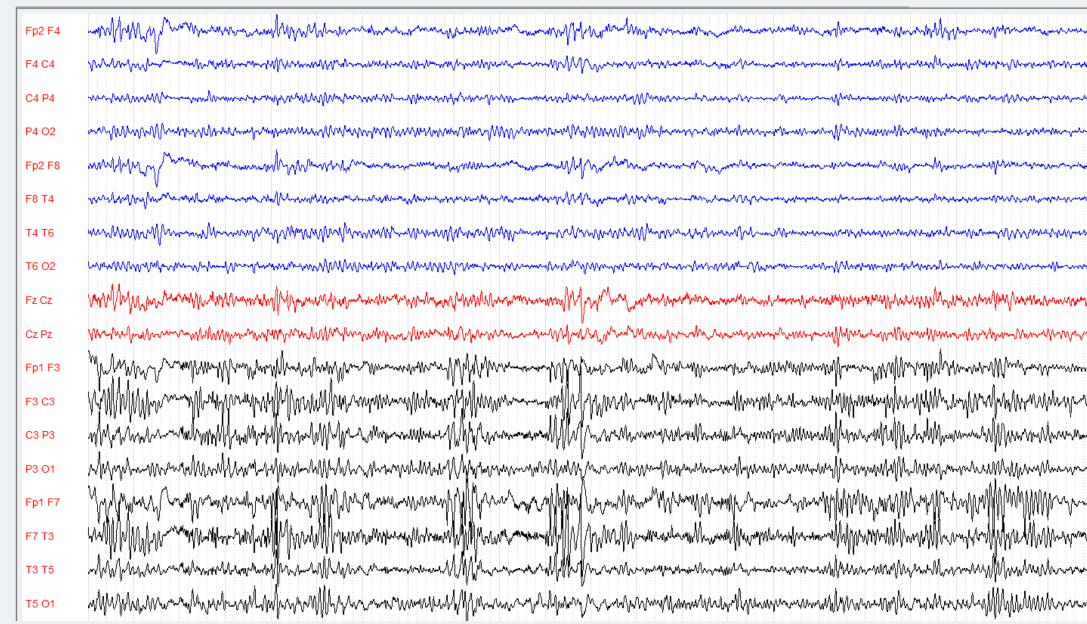
- Cranial CT: Suspected acute ischemic stroke (mild right frontal hypodensity)

Consequently, she was intubated via the orotracheal route and transferred to the Intensive Care Unit (ICU) of our hospital.

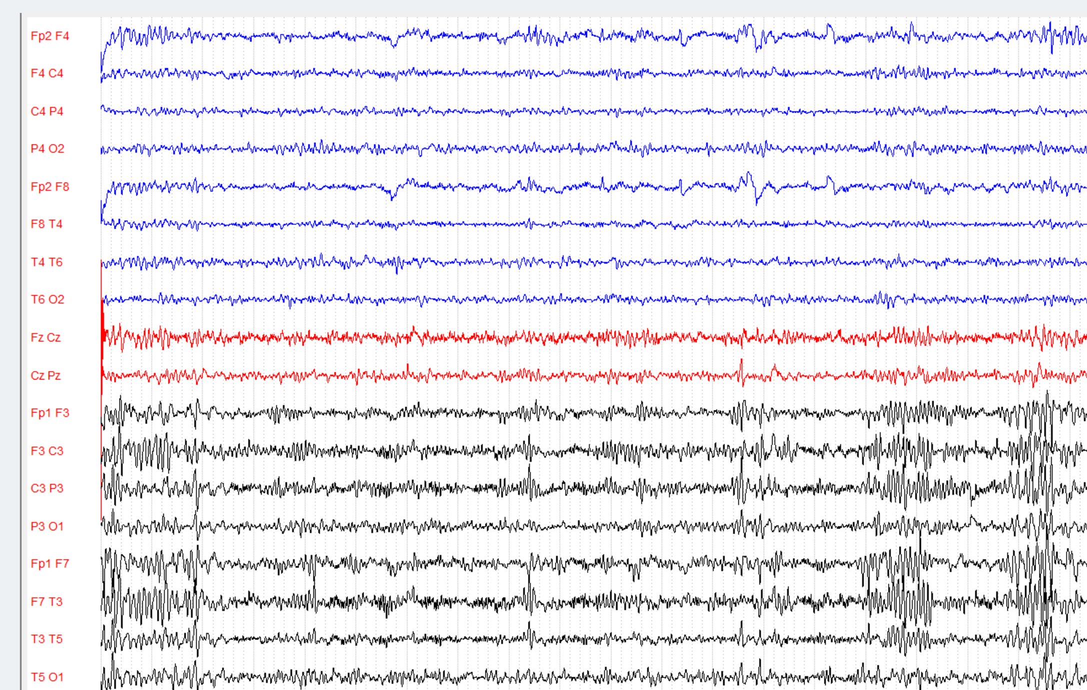
### Follow up

**After 6 months:**

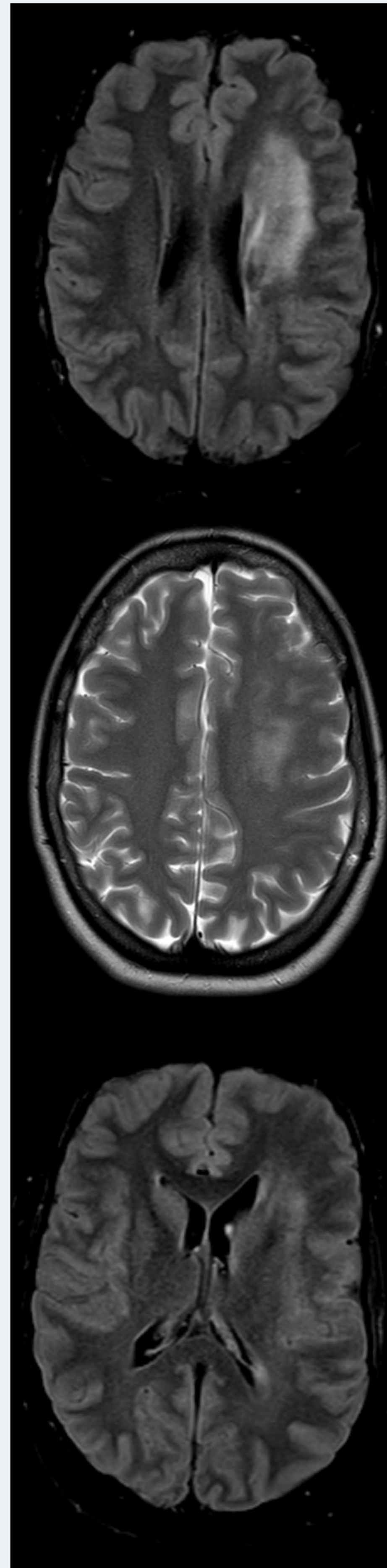
- Undertaken psycho-behavioral therapy
- Maintained the same therapy (Lamotrigine 150 mg/day and Perampanel 8 mg/day )
- Absence of seizures



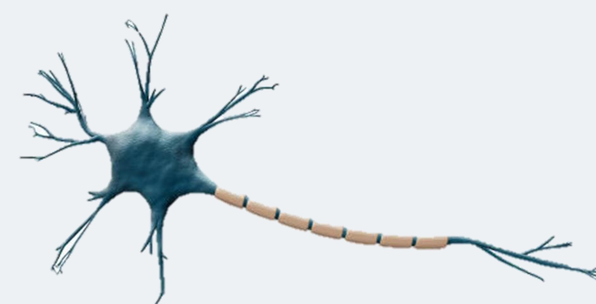
Interictal EEG recorded in 2020



During her ICU stay, an **EEG** was conducted within the therapeutic window, documenting interictal abnormalities in the left hemisphere.



**Cranial MRI:** Confirmed known malformation. Absence of acute cerebrovascular events



## Discussion

- **Video-EEG**: gold standard
- Consider biomarkers: prolactin, lactate, cpk
- Differential diagnoses: epilepsy, syncope, movement disorders
- Apply **multidisciplinary management,** possibly including a psychiatrist.
- Use anti-seizure medications correctly
- Undertake **psychotherapy** pathway

## Conclusions

This case underscores the need for early and accurate differential diagnosis of PNES, even in complex clinical scenarios.
Timely use of video-EEG and clinical expertise are essential to prevent unnecessary invasive treatments and to establish an appropriate therapeutic pathway.

## References

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