CLINICAL AND ELECTROPHYSIOLOGICAL FEATURES OF ISOLATED TONIC SEIZURES (ITS)

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INTRODUCTION

Isolated tonic seizures are solitary unilateral or bilateral contraction of one or more muscle groups which leads to posturing of the limbs or body.

They usually occur several times a day and may occur in clusters.

Most times tonic seizures occur alongside other seizure types. Hence in describing isolated tonic seizures, tonic seizures that occur alongside other seizure types are excluded.

OBJECTIVE

To describe the clinical and electrophysiological characteristics of isolated tonic seizures.

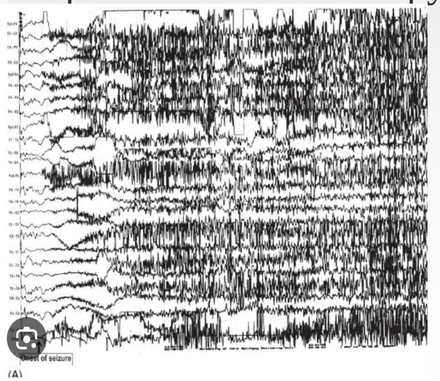
LIMITATION OF STUDY: This is a single centre study with a small sample size

MATERIALS AND METHODS

All the data from the adult and Pediatric Epileptic Monitoring Units (OPIC report) were sorted out to identify those with isolated tonic seizures on long term video electroencephalogram (LTVEM). Tonic seizures with corrupted video files and other seizure types were excluded.

RESULTS

Twelve out of 490 patients (2.4%) who had tonic seizures alongside other seizure types had LTVEM confirmed isolated tonic seizures. There were 6 males and 6 females with a M:F ratio of 1:1. The mean age of onset of the seizures was 4 years. Eleven out of 12 (92%) had generalized seizure semiology, while one (8%) was focal. All had neuro-developmental challenges except the one with a focal seizure. The EEG showed seizures that started abruptly and ended abruptly masked by a lot of muscle artifacts, not associated with apnea. The mean duration of seizure was 15 seconds. Nine out of 12 (75%) had several episodes per day. Six (50%) responded to monotherapy.



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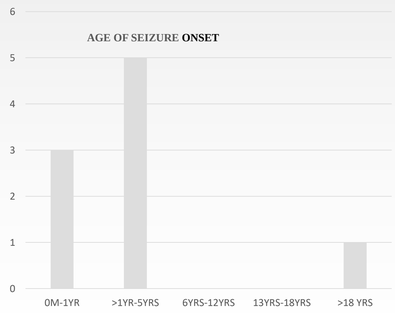

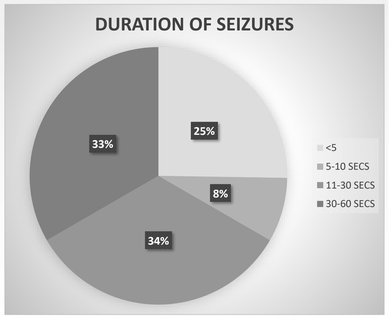

CONCLUSION

Isolated tonic seizures are common in children and in adults with neuro-developmental delay. They are majorly of generalized onset with generalized seizure semiology, of short duration, occur several times a day and may be intractable requiring antiseizure medication (ASM) polytherapy.

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