

# Benign spasms of infancy or benign myoclonus of early infancy: polygraph-EEG recordings

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Benign myoclonus of early infancy (BMEI) is a well-defined entity of uncertain etiology, characterized by nonepileptic paroxysmal motor phenomena affecting the muscles of neck, trunk and upper limbs.

It appears in children with normal psychomotor development in the first year of life and has a good long-term prognosis, spontaneously resolving before age 2 years [1-2].

The spectrum of motor phenomena observed in this entity is wide and includes myoclonic jerks, spasms, brief tonic contractions and negative myoclonus. Distinction between BMEI and infantile epileptic disorders can be challenging given the clinical similarities [2-3].

Ictal electroencephalography (EEG) recording is always normal, which makes it the gold standard test for

the differential diagnosis between this entity and the epileptic syndromes in infancy, mainly West syndrome.

Although this entity is widely known, its polygraphic recording is rarely shown in the literature. The EEG recording with polygraphy and video of our two patients helps to the diagnosis of this paroxysmal nonepileptic disorder [4-5].

Case 1: A 2-month-old boy presents repeated brief episodes of elevation of upper limbs without changes in alertness twelve hours after vaccination (diphtheria, tetanus, pertussis) (*video sequence 1*).

Case 2: A 11-month-old girl presents repeated head drops with no other associated symptoms (*video sequence 2*).



VIDEOS ONLINE



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## Legends for video sequences

### Video sequence 1

The video-EEG records episodes compatible with spasms without changes in the EEG tracing.

### Video sequence 2

In the video-EEG no ictal modification is observed, only a fast activity produced by motion artifact.

**Key words for video research on [www.epilepticdisorders.com](http://www.epilepticdisorders.com)**

*Phenomenology:* nonepileptic paroxysmal motor phenomena, myoclonic jerks, spasms, brief tonic contractions and negative myoclonus

*Localization:* neck, trunk and upper limbs

*Syndrome:* benign spasms of infancy, benign myoclonus of early infancy

*Aetiology:* unknown

**Disclosures.**

None of the authors have any conflict of interest to declare.

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