

## THE “OTHERBABINSKI SIGN” IN HEMI FACIAL SPASM-A CASE REPORT

Rajasekharan C<sup>1\*</sup> and Akhil Krishna<sup>2</sup>

<sup>1</sup>Professor of Medicine, Department of Medicine, Medical College Hospital, Thiruvananthapuram-695011.

<sup>2</sup>Senior Resident, Department of Medicine, Medical College Hospital, Thiruvananthapuram-695011.

\*Corresponding Author: Rajasekharan C

Professor of Medicine, Department of Medicine, Medical College Hospital, Thiruvananthapuram-695011.

Article Received on 06/06/2017

Article Revised on 27/06/2017

Article Accepted on 18/07/2017

### ABSTRACT

A 70-year-old lady presented with history of abnormal movements involving the right side of her face of 10 years duration. The movements were persisting during sleep. She had two sittings of botulinum toxin (BTX) chemodenervation, without any relief. Two years' before, she was advised microvascular decompression (MVD) surgery for which she was not willing. On examination she had frequent, involuntary, intermittent or continuous twitching of her right eyelid which spread to include the whole lid, the cheekbone area and then the lower jaw (figure1.Video), and the eye closure was associated with simultaneous elevation of ipsilateral eyebrow-“brow lift sign”(figure1and2.Still image).There were no other focal neurological deficits. She was diagnosed to have typical hemifacial spasm (HFS).

**KEYWORDS:** A 70-year-old lady presented with history of abnormal movements involving.

### INTRODUCTION

The “browlift sign”, Babinski-2 sign or ‘other’ Babinski sign is diagnostic of HFS, thus ruling out focal motor seizures, facialmyokymia, tics and craniocervicaldystonia as differentials. This sign denotes the eye brow rising during eye closure due to contraction frontalis muscles or co-contraction of orbicularis oculi and frontalis muscles. This image demonstrates the importance of integrating Babinski-2 sign when evaluating abnormal facial movements, as it may help in differentiating hemi facial spasm from other abnormal craniofacial movement disorders. Now she is on Gabapentin 900milligrams daily but with no apparent relief.

### CASE REPORT

A 70-year-old lady presented with history of abnormal movements involving the right side of her face of 10 years duration. The movements were persisting during sleep. She had two sittings of botulinum toxin (BTX) chemodenervation, without any relief. Two years' before, she was advised microvascular decompression (MVD) surgery for which she was not willing. On examination she had frequent, involuntary, intermittent or continuous twitching of her right eyelid which spread to include the whole lid, the cheekbone area and then the lower jaw (figure1.Video), and the eye closure was associated with simultaneous elevation of ipsilateral eyebrow-“brow lift sign”(figure1and2.Still image).There

were no other focal neurological deficits. She was diagnosed to have typical hemi facial spasm (HFS).

The “browlift sign”, Babinski-2 sign or ‘other’ Babinski sign is diagnostic of HFS, thus ruling out focal motor seizures, facialmyokymia, tics and craniocervicaldystonia as differentials. This sign denotes the eye brow rising during eye closure due to contraction frontalis muscles or co-contraction of orbicularis oculi and frontalis muscles. This image demonstrates the importance of integrating Babinski-2 sign when evaluating abnormal facial movements, as it may help in differentiating hemifacial spasm from other abnormal craniofacial movement disorders. Now she is on Gabapentin 900milligrams daily but with no apparent relief.

To conclude, HFS can result from tumor, vascular malformation, and dolichoectatic artery, thus warranting preoperative radiological investigations for a correct diagnosis.<sup>[1]</sup> Repeat MVD for HFS following an aborted first MVD can be an effective procedure. Patients who undergo early re-exploration are significantly more likely to be cured or improved than patients who undergo late re-exploration.<sup>[2]</sup> The surgeon should be concerned about missing the responsible vessels in patients with typical HFS who completely failed the first MVD.<sup>[3]</sup>

**Image 1: Video showing involuntary, intermittent or continuous twitching of the right eyelid which spreads to include the whole lid, then the cheekbone area, then the lowerlid. (Uploaded as a separate Jpeg file).**



**Image 2: Still image of Hemi facial spasm showing the “other Babinski sign” or the “brow lift sign”.**

#### **AUTHOR CONTRIBUTION**

Author RC was responsible was the primary clinician involved in patient care. Both the authors Raced AK was responsible for taking the consent, editing and formatting the images drafting the caption and literature review.

**Consent:** All authors declare that “written informed consent” was obtained from the patient for publishing their images.

#### **ACKNOWLEDGEMENT**

There were no funding agencies or sponsors for this study and manuscript preparation.

#### **Competing interests**

All the authors declare that there are no competing interests.

#### **REFERANCES**

1. Han IB, Chang JH, Chang JW, Huh R, Chung SS. Unusual causes and presentations of hemi facial spasm Neurosurgery, Jul 2009; 65(1): 130-7.
2. Engh J A , Horowitz M , Burkhat L, Chang YF, Kassam A. Repeat microvascular decompression for Hemi facial spasm.J NeurolNeurosurg Psychiatry, 2005; 76: 1574-1580.
3. Li CS. Varied patterns of postoperative course of disappearance of hemi facial spasm after micro vascular decompression. Acta Neurochir (Wein), Jun 2005; 147(6): 617-20.