

# Familial Bell's Palsy – Fact Or Fiction? A Report Of 2 Cases And Review Of The Literature

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## Abstract

### INTRODUCTION:

Bell's palsy has long been considered an isolated phenomenon. Using genealogical studies, there is a possible suggestion that there might be a hereditary component for this phenomenon. We present 2 cases that suggest that this presentation may not be that unusual.

### CASE 1:

This is a 41 year old female who presented with the 5th episode of right sided Bell's palsy with a past history of several previous episodes of the same separated by several months interval. Patient was treated with a taper dose of Prednisone and acyclovir followed by valcyclovir, with full recovery in 3 weeks. Medical history was significant for recurrent shingles and no history of trauma. Family history was suggestive of recurrent Bell's palsy on her maternal side, namely her mother, maternal uncle and cousin. The combined number of episodes for the family was 8, with an "age of first episode" ranging from 24 to 70.

### CASE 2:

This is a 22 year female who presented with her 3rd episode of left sided Bell's palsy with a past history of several previous episodes separated by 4 to 6 weeks. Patient was treated with a taper dose of prednisone and acyclovir followed by valcyclovir. She made a full recovery within 4 weeks. Medical history was unremarkable for trauma or shingles. Family history was suggestive of similar illness on her maternal side, namely her mother and maternal

grandmother.

### DISCUSSION:

Etiology of Bell's palsy has been controversial and has included immunological factors, zoster virus reactivation, climate change and inflammatory conditions.(1,2) Familial Bell's palsy has been noted but not explained in the literature.(3) An autosomal dominant inheritance with low penetrance has been postulated but not proved.(3) Review of the literature, including our patients', showed several families with no demographical similarities that have affected by this presentation.(1,2,3,4) One family, where consanguinity was common, had 29 individuals affected in a period of 3 generations, hinting at a genetic component.(4) Genetic testing in those exhibiting these findings could prove useful to assess predisposition to the illness and possibly provide with an alternate treatment therapy.

### References

- 1.-Alonso-Vilatela M, Bustamante-Balcárcel A, Figueroa-Tapia HH. Family aggregation in Bell's palsy. *Acta Otolaryngol*. 1979;87:413-7.
- 2.-Samuel J. Familial Bell's palsy. *J Laryngol Otol*. 1984; 98:977-9.
- 3.-Yanagihara N, Yumoto E, Shibahara T. Familial Bell's palsy: Analysis of 25 families. *Ann OtolRhinolLaryngol Suppl* 1988; 137:8-10.
- 4.-Willbrand JW, Blumhagen JD, May M. Inherited Bell's palsy. *Ann OtolRhinolLaryngol*. 1974; 83:343-6.

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