

## Treatment varies for Bell's palsy in children with Lyme disease

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<https://danielcameronmd.com/treatment-varies-for-bells-palsy-in-children-with-lyme-disease/>

[The retrospective review](#) included 93 children with idiopathic Bell's palsy to the University Hospital Southampton NHS Foundation Trust from 2010 to 2017. Idiopathic facial nerve palsy, formerly called Bell's palsy, is seen in early Lyme disease.

Very few children in the study with Bell's palsy reported a tick bite or rash. In fact, only 14% had a tick bite, while 5% had a rash. Lyme disease testing was performed on 76 of the 93 children. Of these, 22 (29%) were positive for Lyme.

Neuroimaging was performed on approximately 20% of the children. The most common findings were consistent with inflammation or infection of the facial nerve.

Surprisingly, despite increased awareness of Lyme disease in the Hampshire region, nearly 1 in 5 children in the study were not tested for the tick-borne disease.

Additionally, the authors point out, "even in the absence of other signs or symptoms of Lyme disease, an FNP could be the sole presenting sign."

### Bell's palsy treatments

"We found significant variation in medical management, with some children appearing to receive no treatment," the authors write.

- Only 73.1% were treated with an antibiotic.
- The number of treatment days varied from 1 to 28, with a median of 14 days.
- 44% of the children were treated with the oral steroid, prednisolone.
- Over 17% were prescribed an antiviral medication.
- Nearly 20% received neuroimaging. The most common findings were consistent with inflammation or infection of the facial nerve.

The study was not designed to determine the outcome for these children. The study raises several unanswered questions: Could steroid use in these children affect the outcome? Could little or no treatment affect their outcome? Would any of these children develop long-term complications?

### Study Conclusions

- “Lyme disease is a significant cause of FNP in this endemic area of the UK, and there was a large degree of variability in management prior to national guideline publication.”
- “In areas endemic with Lyme disease, Lyme disease should be considered as the likely cause of facial nerve palsy in children until proven otherwise.”
- “All children presenting with [facial nerve palsy] FNP to health care providers in these areas should have Lyme serology tested and empirical treatment for Lyme initiated pending the results of tests.”
- “Areas with endemic Lyme disease should consider introducing local guidelines supporting routine investigation and management for FNP, including empiric treatment for Lyme disease in accordance with NICE guidelines to improve care and reduce variability.”

(NICE refers to the UK National Institute for Health and Care Excellence, which developed guidelines for clinicians on the investigation and management of Lyme disease.)

Editor's note: The number of cases of facial nerve palsy could be higher as the numbers reflect only Bell's palsy in children, who were evaluated at their hospital. Many doctors treat Bell's palsy in their office.

**Related Articles:**

[Steroids harmful to patients with Bell's palsy caused by Lyme disease](#)

[Case report: 46-year-old Canadian man with Bell's palsy](#)

[Clinical judgement leads to successful Lyme disease treatment in young child](#)

**References:**

1. Munro APS, Dorey RB, Owens DR, Steed DJ, Petridou C, Herdman T, Jones CE, Patel SV, Pryde K, Faust SN. High frequency of paediatric facial nerve palsy due to Lyme disease in a geographically endemic region. *Int J Pediatr Otorhinolaryngol.* 2020 Jan 25;132:109905.

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