Ayurvedic Intervention in Facial Nerve Palsy in Children: A Case Report

Dr.[Rekha V Shinde 1](https://www.cureus.com/users/431150-rekha-shinde) ,Dr. [Hitesh N. Mantri 2](https://www.cureus.com/users/450541-hitesh-n-mantri) Dr. Manisha Ashish Gotmare3 , Dr.[Trupti Thakre](https://www.cureus.com/users/450542-trupti-thakre) 4

1\* Assistant Professor, Department of Kaumarbhritya, Datta Meghe Ayurved College, Hospital and Research Centre, Nagpur, Maharashtra, India. Email- [rekhashinde258@gmail.com](mailto:rekhashinde258@gmail.com) 9325614777.

2  Professor, Department of Kaumarbhritya, MS Ayurved College Gondia, Maharashtra India.

3 Associate Professor, Department of Shalakyatantra, Datta Meghe Ayurved College, Hospital and Research Centre, Nagpur, Maharashtra, India.

4 Assistant Professor, Department of Kaumarbhritya, MGAC, Wardha. Maharashtra India.

**Corresponding Author Details\***

Rekha V Shinde1\*

Department of Kaumarbhritya, Datta Meghe Ayurvedic College, Hospital and Research Center, Nagpur.

Phone No. 9325614777.

Mail id: rekhashinde258@gmail.com

ORCHID-ID https://orcid.org/ 0000-0001-7497-4156

# Abstract

One cause of facial nerve paralysis is seventh cranial nerve neuropathy, sometimes referred to as Bell's palsy. Facial nerve palsy may be present from birth or develop later in life. Facial nerve palsy can have developmental origins as well as acquired ones sometimes. The most common cause of facial palsy in children is idiopathic facial palsy, often known as Bell's palsy. It is the most common cranial nerve dysfunction in children. The facial nerve, or seventh cranial nerve, is responsible for carrying out motor, sensory, and parasympathetic functions. A four-year-old girl with facial nerve palsy is demonstrated in this case study to exhibit asymmetrical facial expressions, partial closure of one eye, tears of the left eye, and facial sagging on the left side. To treat the child, ayurvedic intervention is utilized along with panchkarma therapies, and panchkarma treatment effectively reduces symptoms.

**Keywords:** congenital facial palsy, facial paralysis, ayurvedic intervention, bell's palsy, facial nerve palsy.

# Introduction

Bell's palsy is a common but contentious condition that currently has no known aetiology. Studies from the present day indicate that 80 percent of people may heal on their own without counselling. In children under the age of ten, the annual incidence of facial nerve palsy is 2.7 per 100,0001. Bell's palsy is associated with a positive prognosis since it only involves partial paralysis of the peripheral facial nerve and only happens in a single episode 2. Bell's palsy, sometimes referred to as facial nerve palsy, causes the face muscles to become briefly weak or paralysed 3. An Ayurvedic therapy called "shirodhara" involves sprinkling warm oils or liquids over the forehead. Medicinal oils are used during the process 4. This study may help physicians manage Bell's palsy and avoid recurrences by utilizing panchakarma treatment, such as shirodhara, in conjunction with ayurvedic interventional therapy.

# Case Presentation

A four-year-old girl presented with her parents at the Datta Meghe Ayurvedic Medical College, Hospital, and Research Centre in Nagpur with complaints of left eye watering continuously, incomplete closure of the left eye, even during sleep, and moderate facial asymmetry that has been present for two years. Her parents also stated that she formerly had greater facial asymmetry than she has now, which eventually corrected itself to some extent. She now has a slight facial asymmetry, chronic left eye tears, partial left eye closure, and continuous left eye weeping. The mother's prenatal history has little bearing on the illness at hand. Perinatal history: The baby was born via normal vaginal delivery at the vertex of a non-consanguineous union. The mother reported that there was no delivery trauma or sickness at the time of the birth. The postnatal history was irrelevant. Parents first noticed the left eye's incomplete closure and continual tears when the child was two years old. In order to treat their kid for the same sickness, the parents claimed that they had not sought medical advice because the child's symptoms appeared to be mild to moderate. They failed to distinguish between a disease and a child's typical development based on the family's history. Parents denied having any illness at this time in their child's growth from birth to four years of age. Parents initially sought assistance from our ayurvedic OPD with complaints of left eye tearing that didn't stop during sleep. Otoscopy was used to examine the child, and it revealed no structural abnormalities or infectious signs. Following a thorough examination, the child was diagnosed with mild to moderate developmental facial nerve palsy. Ayurvedic treatment, particularly shirodhara, was used to treat the condition. Within a week of the shirodhara therapy, the child had symptomatic relief, as can be seen in Figures *1* and 2.

**TABLE 2: Comparison of symptoms before and after the treatment**



**FIGURE 1: A four-year-old girl has facial nerve palsy**



**FIGURE 2: After treatment, a four-year-old girl with facial nerve palsy has complete closure of the left eye**

She was able to close her eye while sleeping, and her eye tears ceased. After the therapy period was through, the child had follow-up appointments every week. Significant improvement was seen following ayurvedic panchakarma therapy, shirodhara, and some of the oral herb-mineral drugs listed, as can be seen in Tables *1* and 2.

**TABLE 1: Medical intervention to treat the disease**

|  |  |  |  |
| --- | --- | --- | --- |
| **Interventions** | **Dose** | **Frequency** | **Duration** |
| Shirodhara | Brahmi oil 200 ml+sesame oil 1000 ml | Daily once for 40 minutes | Eight Days |
| Tablet saptamrita loha | One tablet (120 mg) | Twice in a day after meal | 10 Days |
| Cap palsinuron | One capsule (120 mg) | Twice in a day after meal | 10 Days |

|  |  |  |
| --- | --- | --- |
| **Symptoms** | **Before Treatment** | **After Treatment** |
| Tearing | Continuous tearing of left eye | Tearing of left eye stopped |
| Closure of eye | Incomplete closure of left eye | Able to close left eye |
| Facial asymmetry | Moderate asymmetry of face | Mild asymmetry of face |

# Discussion

# Since Bell's palsy rarely manifests in children, it is crucial to identify it quickly and get the appropriate treatment. One of the world's oldest systems of science is Ayurveda. However, the traditional system of medicine and a way of life are not the only things that teach us how to preserve and protect our health. Shirodhara is an ayurvedic practice that involves gently pouring medicated oil over the forehead5.

Traditional ayurveda fits in well with contemporary holistic healing paradigms that emphasize the individual's total health6.

The patient responded well to the oral ayurvedic medications, as can be seen in Table 1, and to the shirodhara therapy after eight days. Infantile facial nerve palsy can be inherited or acquired, and its cause may never be determined 7. Since most doctors base their diagnoses on clinical signs and symptoms, it is important to properly rule out any secondary causes. The "bulls-eye" rash of Erythema migrans, as well as a Lyme antibody titre, can rule out Lyme disease. Oral corticosteroids should be used, ideally within three days after the beginning of Bell's palsy, in youngsters as well 8.

Making an accurate diagnosis and providing the right prognosis for a kid with facial nerve paralysis requires a thorough evaluation. In Bell's palsy patients, inadequate closure of the eye often manifests as dryness of the eye, but in this case, the incomplete closure of the left eye was accompanied by constant tears from the same eye. It suggests a condition that involves the lacrimal gland. Lacrimation is controlled by the facial nerve [9]. The patient's symptoms and the history provided by the patient's parents were used to make the diagnosis.

# Conclusions

There is a dearth of data supporting the potential efficacy of Shirodhara oils alone or in combination with other Ayurvedic therapies for symptom management. Alternative therapies like Ayurveda, which includes the medicinal oil shirodhara, may be beneficial for those with facial nerve palsy. Despite this, practitioners should follow their clinical judgement and patient desire because there isn't a solid evidence foundation. Well-controlled clinical studies comparing shirodhara therapy to other Ayurvedic therapies and/or mainstream medication are required to determine the relative efficacy of various Shirodhara oils in treating Bell's palsy. The one case study cannot be used to derive any firm conclusions.

**Disclosures**

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