

Case of Facial Diplegia?? Following Surgical Stress

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ABSTRACT

Introduction: Bilateral facial nerve palsy or facial diplegia is a rare neurological disorder with an incidence of 1 in 5000000. Most common causes of bilateral facial palsy include Guillain-Barre syndrome, sarcoidosis. However, etiology in most of the cases remains identified in spite of detailed evaluation.

Case report: 25 year old female presented with difficulty in speaking since 8 days following caesarian section, and found to have bilateral LMN type facial palsy.

Conclusion: In this case the probable cause for bilateral facial nerve palsy is secondary to the surgical stress.

Keywords: Bilateral Facial Nerve Palsy, Facial Diplegia, Guillain Barre Syndrome, Sarcoidosis, Surgical Stress

INTRODUCTION

Bilateral LMN facial palsy (facial diplegia) is a rare condition, comprising less than 2% of all cases. Most of the cases have underlying medical conditions, like infections, neoplastic, trauma, metabolic disorders and neurological causes.

Most patients with facial diplegia are benign and self-limiting, including Bell's palsy, Guillain-Barré syndrome, multiple idiopathic cranial neuropathies, brainstem encephalitis, Miller Fisher syndrome and associated with benign intracranial hypertension. Hansen's disease, cryptococcal meningitis with acquired immunodeficiency syndrome and tuberculous meningitis are those with an infectious etiology.^{1,2}

Other rare causes include diabetes, sarcoidosis, head trauma, SLE with severe neuropathy, bulbospinal neuronopathy. Bilateral symmetrical facial palsy is unusual and ominous sign which requires detailed evaluation for the etiology.

CASE REPORT

A 25 year old female was admitted in OBG ward at Akash institute of medical sciences and research center for wound infection following LSCS(day 10). Incidentally medicine opinion was sought as the patient complained of slurring speech, in terms of unable to pronounce the words clearly, difficulty in closing eyes, difficulty in chewing the food since two days.

Patient had undergone LSCS 1 week ago and there was no complication noted during the immediate postpartum period. However there was no history of fever, headache, seizures, head trauma or weakness of upper and lower limbs.

On Examination: vital parameters were normal.

Physical Examination: did not reveal any evidence for Hansen's

CNS Examination: revealed bilateral lower motor neuron facial palsy

Other cranial nerves were normal, with no other neurological deficits. CVS, RS, PA was clinically normal. Hence clinically it was diagnosed to be Facial diplegia and further work up was done to identify the cause.

Laboratory investigations RBS, CBC, LFT, RFT, S.Electrolytes, Thyroid function tests, HIV, HBsAg, HCV, VDRL, ANA were within normal limits. MRI brain revealed no commentable abnormalities. CSF analysis showed no abnormalities.

Nerve conduction studies and electromyography (EMG) showed delayed motor latencies with denervation changes in bilateral facial muscles, suggesting lower motor neuron type facial nerve palsy (Bell's palsy).

DISCUSSION

Unilateral facial nerve palsy, ia a common neurological disorder which we encounter on a day to day basis, which has an incidence of 25 per 100,000 population.

Facial diplegia (FD) represents less than 2% of all facial palsy cases and has an incidence of 1 per 5,000,000 population.¹⁻³

The causative factor for facial paralysis includes many conditions such as congenital, traumatic, infectious, neurological, metabolic, neoplastic, toxic, vascular, and idiopathic.

Most of the cases of bilateral facial palsy is less often idiopathic (under 20%)⁴⁻⁶ therefore requires detailed evaluation.

In a study conducted by Teller and Murphy showed that Lyme disease is responsible for 36% of the cases for facial diplegia. Guillain- Barre syndrome (5%), trauma (4%), sarcoidosis (0.9%), and AIDS (0.9%) are other seen causes.⁷ Facial diplegia is also noted in Diabetic patients.⁸

The differential diagnosis is extensive and hence can present as a diagnostic challenge.

There are some potentially fatal conditions which need to be identified. Facial diplegia may be the first symptom that requires early treatment in many diseases for which treatment depends on the etiology. Clinical evaluation for assessment of etiology and severity is the first step before the starting treatment.

In our case we identified facial diplegia following surgical stress (LSCS) which has not been documented in the literature. Our patient was started on corticosteroids (40mg/day) and physiotherapy was initiated.

Patient showed improvement over a period of 1 week in terms of recovery of weakness of left sided facial muscles. She is on regular follow up with tapering dose of steroids and physiotherapy.

CONCLUSION

A rare case of facial diplegia, following surgical stress (LSCS).

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Figure-1: (a) Shows patient with LMN bilateral facial palsy; (b) Shows patient with bells phenomenon bilaterally



Figure-2: Shows recovery of facial palsy on left side

However good improvement was observed in recovery, left side > right side with steroids and physiotherapy. However as per the literature the known causes were worked up and were normal. Therefore post surgical stress may be the etiological factor in our case.

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