



Review Article

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AN OVERVIEW ON BELL'S PALSY WITH SPECIAL REFERENCE TO ARDITA IN AYURVEDIC PERSPECTIVE

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ABSTRACT

In Ayurveda there is description of a condition called Ardita under vataroga which manifests with the features more similar to facial palsy such as deviation of face, loss or decreased function of the affected muscle, numbness or pain on the affected side of the face. The symptoms here are exhibited based on the dosha which are predominantly affected. Although the most commonly known cause of facial paralysis (FP) is Bell's palsy, there are actually many different causes of Facial Paralysis, the treatment and prognosis of which varies considerably depending on the cause. Among these, Bell's palsy can be a condition related to ardita and the treatment principles are almost identical. The incidence of this is 20-30 cases for 100,000 and accounts for 60-70% of all cases of unilateral peripheral facial palsy with the recurrence range of 4-14%. Management of Facial Paralysis in Ayurveda includes oil massage, mild fomentation, nasya therapy (nasal drops), administration of the medicaments which are possessing snigdha (unctuous), amla (sour) and lavana rasa and vatahara oushadhas (vata balancing medicines). The general goal of therapy is to maintain the health and function of the facial muscles while the nerve heals and stimulates facial nerve through administration of steroids, antivirals, eye protective measures along with physiotherapy. As the disease is recurrent, it often needs regular monitoring along with rehabilitating and rejuvenating treatments which can be successfully managed by our ancient treatment principles either as a stand-alone or assisted with alternative treatment modalities wherever necessary and the concept has been framed accordingly.

Keywords: Ardita, Vataroga, Bell's palsy, Facial Paralysis

INTRODUCTION

The term facial palsy generally refers to weakness of the facial muscles, mainly resulting from temporary or permanent damage to the facial nerve¹. Bell's palsy, also termed Idiopathic Facial Paralysis (IFP), is the most common cause of unilateral facial paralysis. It is one of the most common neurologic disorders of the cranial nerves². The annual incidence of this idiopathic disorder is between 11 and 40 per 1,00,000 annually, or about 1 in 60 persons in a lifetime. The onset of Bell's palsy is fairly abrupt, maximal weakness being attained by 48h as a general rule. Pain behind the ear may precede the paralysis for a day or two. Taste sensation may be lost unilaterally, and hyperacusis may be present. In some cases there is mild cerebrospinal fluid lymphocytosis. Magnetic resonance imaging (MRI) may reveal swelling and uniform enhancement of the geniculate ganglion and facial nerve, and in some cases, entrapment of the swollen nerve in the temporal bone. Approximately 80% of patients recover within few weeks or months. Electromyography may be of some prognostic value; evidence of denervation after 10 days indicates that there has been axonal degeneration and that there will be a long delay (3 months, as a rule) before regeneration occurs and that it may be incomplete. The presence of incomplete paralysis in the first week is the most favorable prognostic sign. Symptomatic measures include, use of paper tape to depress the upper eyelid during sleep and prevent corneal drying, massage of the weakened muscles, a course of glucocorticoids, given as Prednisone 60 to 80mg daily during the first 5 days and then tapered over the next 5 days, appears to shorten the recovery period and modestly treated with 3 days of onset with both Prednisone and Acyclovir (400mg 5 times daily for 10 days) had a better outcome than patients treated with Prednisone alone³. Ardita roga which is explained under vataroga in Ayurvedic

literatures manifests with the features more similar to Bell's palsy and are manifested based on the doshas which are affected predominantly.

An Overview on Ardita Roga

Ardita is one of the vata vyadhi which is also known as ekayama where the vitiated vata gets localized in upper parts of the body (vatalaihi urdhwamaasthithaha) especially in one half of the face with or without involvement of the body. The causes of ardita as enumerated by our acharyas are shirasabharaharanad (carrying heavy load on the head), atihasya (over indulging in laughing), prabhashanaath (speaking), ultrasavaktra (over exertion on the face), kshavathu (sneezing), vishamadupaghaana (use of irregular, uneven pillow while sleeping), katinanam cha charvanath (chewing very hard materials), persons who are having rakta kshaya (depletion of blood), pregnant & puerperal lady, children, old, emaciated peoples, following a trauma, excessive exposure to cold environment and intake of cold foods, person debilitated due to chronic diseases. This aggravated vata exhibits features such as distortion of the affected side of the face found specially during laughing and seeing (vakrikaroti vaktraardhamuktham hasitameekshitam), tremors of the head (kampate murdha), difficulty in speech (vaaksangha), diminished movement of eyeball (stabdha netrata), increased mobility of tooth (dantachala), hoarseness of voice (svarabhrasha), deafness (shrutihani), suppression of sneezing (kshavagraha), diminished or loss of sense of smell and memory (gandhajana smriti), delusion (moha), exhaustion during sleep (trasa), loss of taste sensation (suptasya) and drooling of saliva from sides of mouth (nishtiva), incomplete closure of affected eyes (parshva ekasyaskshno nimilanam), severe pain in the parts above the

shoulders, half of the body or lower parts of the body (jatrurudhwa ruja tivra sharira ardha adha apiva)^{4,5,6}.

The general line of treatment of Ardita is based on the principles of treatment of vatavyadhi wherein if vata dosha is not associated with other doshas (kevala nirupastamba) it should be treated with snehana (drinking of sneha like ghee, oil, muscle fat or marrow). Moreover, the person who has become weak by drinking of fats should be reassured and administered oleation therapy by use of milk, soups of grains, meat soup, meat of animals domesticated, aquatic and of marshy lands or with payasa (milk pudding), krishara (rice boiled with green gram) mixed with fats, sours and salts and also by administration of therapies like anuvasana (oil enema), navana (nasal medication), intake of tarpana ahara (foods added with fats), and doing swedana (giving sudation therapy) by sankara sweda repeatedly^{7,8}.

Ayurveda advocates specific treatment of ardita by navana (nasal medication), murdha thaila (anointing oil on the head), tarpana (filling oil to the ears and eyes) with ksheera sarpi, intake of tarpana ahara (nourishing foods), nadi sweda (fomentation) and upanaha (poultice) with anupa pashu pakshi (meat of marshy animals & birds). It is also advised to do vamana (emesis) if it is associated with swelling and siravyadha (venesection), if there is burning sensation and redness of affected side^{9, 10}.

Herbal remedies in Ardita

- Single herb formulation includes use of vatahara drugs like Lashuna (*Allium sativum* Linn.), Nirgundi (*Vitex negundo* Linn.), Eranda (*Ricinus communis* Linn.), Lavanga (*Syzygium aromaticum* (Linn. Merr. & Perry.), Sarshapa (*Brassica juncea* (Linn.) Czern. & Coss.), Rasna (*Pluchea lanceolata* C. B. Clarke.), Masha (*Vigna mungo* L.), Bala (*Sida cordifolia* Linn.), Hingu (*Ferula narthex* Boiss.), Guggulu (*Commiphora wightii*) along with above therapies for successful management of Ardita¹¹.
- If the person suffering from ardita consumes 4 masha (~ 4g) of lashuna kalka (*Allium sativum* Linn.) along with 1 tola (12 g) of navaneetha (butter) regularly, it gets destroyed from the root just as the megha samuha (clouds) gets destroyed due to vayu vega¹².
- One should consume masha (black gram) along with navaneetha (butter) regularly followed by milk or mamsa rasa bhojana, and dashamula kwatha (decoction) in the afternoon if he is suffering from Ardita roga¹².
- One can get rid of Ardita roga if he undergoes swedana karma (fomentation), vatanashaka taila abhyanga (oil massage), shiro basti (holding medicated oil on the head), snehapana, niranantara ghritapana (intake of unctuous substance like ghee or oil), sneha nasya (oil snuffing)¹².

Table 1: Differential Diagnosis

Sl. No.	Type of Facial Palsy	Causes	Inclusion	Exclusion
1	Congenital	Congenital anomaly, syndromes, injury during delivery	Involving facial nerve with weakness in face	Present since birth where facial nerves and muscles fail to develop properly in womb
2	Bell's Palsy	Idiopathic	Peripheral palsy of the facial nerve that results in muscle weakness on one side of the face with forehead involvement and no other neurologic abnormalities	-
3	Ramsay Hunt syndrome	Infection affecting nerve directly (Herpes zoster virus)	Weakness on the affected side of your face which causes the facial muscles to droop	Is a complication of shingles
4	Lyme disease	Infection affecting nerve directly (Spirochete Borrelia burgdorferi)	temporary paralysis of one side of your face	History of tick exposure, rash, or arthralgia; exposure to areas where Lyme disease is endemic ¹⁴
5	Otitis media	Bacterial pathogens	Ear pain	Gradual onset; ear pain, fever, and conductive hearing loss
6	Tumors	Tumor along the length of the facial nerve.	Slow development of a facial weakness over a period of weeks, Hearing loss and/or tinnitus, Dizziness or balance problems	Gradual onset; mental status changes; history of cancer ¹⁴
7	Stroke	Ischemia or Hemorrhage	Facial weakness, Dizziness	Extremities on affected side often involved ¹⁴
8	Head Trauma	Skull fracture to the temporal bone	Difficulty or inability to carry out a range of facial movements and/or expressions, such as smiling, whistling and frowning.	History of trauma ¹³

DISCUSSION

Ardita is the disease of the body mostly affecting one half of the face along with other associated symptoms of pranavata dushti where the symptoms are similar to as seen in Bell's palsy. Difficulty in speech (vaaksangha), facial pain, diminished movement of eyeball (stabdha netrata), hoarseness of voice (svarabhramsha), deafness (shrutihani), loss of sense of smell or

taste (gandharasaajnana) mentioned by our acharyas are seen as the complications of facial palsy in the later stages of disease. The management of this condition is solely dependent on the involvement of vata dosha whether alone (kevala vatajanya ardita) or associated with other doshas (margavarana janya ardita). The first line of management in ardita is based on the principles of treatment of vatavyadhi. To subside the aggravated or vitiated vata dosha, snehana should be given both internally

(snehapana) and externally in the form of shiroabhyanga (oil massage of head), nasya (snuffing), tarpana (oleation of eyes through medicated ghee), sneha swedana (fomentation through medicated pastes along with sneha dravyas). The aims of treatment in the acute phase of Bell's palsy includes strategies to speed recovery through physical therapy, corticosteroids, antiviral agent and to prevent corneal complications through eye patching, lubrication and eye ointments which should be applied at the night. Facial nerve decompressions are occasionally performed early to relieve pressure on the nerve¹⁵. The treatment modality mentioned in other conventional systems of management of Bell's palsy is same as mentioned in our science thousands of years back. However it is told that if the disease is associated with swelling of the affected area due to involvement of kapha dosha vamaana (emesis) should be done and if there is burning sensation and redness of affected side due to vitiated pitta dosha siravyadha (venesection) is the line of management which is similar to decompressive therapy of facial nerve which will be done in later stages to relieve pressure on the nerve. It is also clear that the physical therapy which is done in the form of local abhyanga and swedana in Ayurveda helps the potency of drug to get absorbed into the skin, has also action on that particular dhatu (tissues), pacifies the aggravated doshas and nourishes that particular part. Similarly in modern science it is mentioned that Physiotherapy, which is advised, helps to maintain muscle tone of the affected facial muscles, stimulate the facial nerve, prevents permanent contractures of the paralyzed facial muscles and reduces pain¹⁶.

CONCLUSION

Ardita, which is primarily a vatavyadhi where weakness in one half of the face with or without involvement of body is seen, should be treated based on principles of vatavyadhi chikitsa. Subsequently, the pathophysiology, clinical features and management are more resembling with the features of Bell's palsy which are mentioned in modern science. It is obvious that Bell's palsy will be the nearest correlation for Ardita. Ayur visharadas, based on once own yukti (reasoning), should decide the management of roga (disease) keeping in view of its lakshanas (diagnostic features).

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