

An observational case study on effect of *Lasuna Kalka* (Garlic paste) in *Ardita Vata* (Bell's palsy)

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Abstract

Although Bell's palsy (which leaves the sufferer with partial paralysis on one side of his face), sounds frightening and causes discomfort and stigma, it can be treated in almost all cases with natural herbs. Garlic is commonly known as the natural wonder drug. It is also known as an anti-oxidant and anti-inflammatory agent for cold viruses, and for its effect on stomach infections. Garlic has been used as a popular Bell's palsy treatment to boost immunity and improve circulation, for centuries. Ayurvedic therapeutic literatures recorded application of garlic mixed with butter in the management of Bell's palsy. In the present study an attempt has been made to evaluate clinically the efficacy of *Lasuna* (Garlic) in the management of acute Bell's palsy. *Lasuna* was pounded and equal quantity of butter (*anupana*) was added and administered in two divided doses along with *Kukutanda Sweda* for 7 days. The drug under the trial had shown considerable improvement in the signs and symptoms of Bell's palsy from 5th day of treatment onwards. Hence it can be concluded that *Lasuna Kalka* administered judiciously does have a significant effect on *Ardita Vata*.

Key words: *Lasuna kalka*, Garlic paste, Bell's palsy, *Kukutanda Sweda*.

Introduction

Ayurvedic classics have described 80 *Vatavyadhis*. Charaka's description [1] of *Ardita* includes *Pakshaghata* whereas Sushruta clearly indicates that only *Mukha* (Face) is involved in *Ardita* [2].

Bell's palsy is a common condition affecting patients of all ages and both sexes and is defined as an idiopathic unilateral facial nerve paralysis, usually self-limiting. The hallmark of this condition is a rapid onset of partial or complete paralysis that often occurs overnight. The cause is unknown. Viral infection, vascular damage, trauma and cold exposure have all been implicated. Weakness or paralysis of facial muscular on one side, with failure of eye closure and visible upward deviation of eye a (Bell's sign), dribbling saliva and fluid through the angle of the mouth on affected side, deviation of mouth to normal side, loss of nasolabial fold, loss of frontal wrinkling are the general signs seen in the disease of Bell's palsy [3].

Symptoms include pain in the root of the ear, inability to blow or whistle, numbness and stiffness of cheek on the affected side and collection of chewing food between the cheek and teeth on the affected side. Corticosteroids have been found to improve outcomes, when used early, while anti-viral drugs have not [4]. Most people recover spontaneously and achieve near-normal to normal functions. Many show signs of improvement as early as 10 days after the onset, even without treatment.

The signs and symptoms of Bell's palsy match with the Sushruta's description of *Ardita*. A recipe mentioned in Bhaishajya Ratnawali for the management of *Ardita* with *Lasunadi Kalka* [5] (paste of *Allium sativum* Linn.) was tried in the present case. *Lasuna* is mentioned as best drug in *Vatavyadhis* by Vaghbata [6].

Materials and Methods

Patient who attended the OPD of single drug Therapy Unit at Dr. A. L. Government Ayurvedic Hospital, Vijayawada, Andhra Pradesh, India was taken up for the present study.

Case History

A 25 year old male presented with a sudden onset of deviation of mouth to left side with difficulty in speech and dribbling of saliva for 2 days. Patient also complained of difficulty in closing left eye and distaste of food with inability to chew food properly. There was a pain around the left ear since then with numbness of cheeks. Patient had not received any kind of treatment for the same till then. There was no significant past history of any major illness, but patient had fever 4 days back which subsided after patient had taken Paracetamol tablets without consulting any medical professional.

On examination

Higher mental function: the patient was oriented to time, place, name and was fully conscious.

Asymmetry was perceived during conversation with the patient.

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1. **Blink:** The eyelid on the affected side (left) closed just a trace later than the opposite eyelid.
2. **Nasolabial folds:** of left side was flatter.
3. **Mouth:** The affected (left) side drooped.
4. The patient was asked to look up or wrinkle the forehead; asymmetry was noted. The eye brows of affected site was raised.
5. The patient was asked to close the eyes tightly. There was incomplete closure or incomplete burying of the eyelashes on the affected side.
6. The patient was asked to smile, show teeth and pull back the corners of the mouth. Asymmetry of the mouth was noted.

Physical examination: Patient was moderately built, no evidence of any injury to head. Patient was able to walk properly without any change in the gait.

Vital data:

Temperature: Normal

Pulse: 98/min

Blood pressure: 130/90 mm of Hg

Systemic examination: No abnormality was detected in other systems.

Intervention

Administration of Drug: 10 gm of *Lasuna* (*Allium sativum* Linn.) pounded and equal quantity of butter (*anupana*) was added and administered in two divided doses.

Mirror exercises were given as a part of physiotherapy during the course of treatment. The patient was given *Kukutanda Sweda* after the administration of *Lasuna Kalka* once a day.

Kukutanda Sweda is a traditional fomentation method in which white yolk of hens egg is applied externally and fomentation is given with a cloth dipped in hot water.

Observations: The patient's condition responded to the treatment. The sign of palsy was started to disappear from 5th day onwards. Improvement was noticed initially in closing of eyelids and deviation of angle of mouth to healthy side. Dribbling of saliva and pain around the ear was reduced. Taste perception also improved as patient was able to masticate the food in a better way. Difficulty in speech and numbness of the cheek on the affected side persisted even after the completion of course of the treatment. However, patient was administered with *Vatahara Shamana Aushadhis* and mirror exercise was advised rest for 15 days. By the end of 4 weeks patient had noteworthy improvement from most of the complaints.

Discussion: Most people with Bell's palsy start to regain normal facial function within 3 weeks – even those who do not receive treatment [7]. However early treatment (within 3 days after the onset) is necessary for benefit [8] with a 14% greater probability of recovery [9]. *Lasuna* is said to be a best *Vatakaphahara* drug [10]. It has a wide range of indication when used with different *anupana*. Physiotherapy can be beneficial to some individuals with Bell's palsy as it helps to maintain muscle tone of the affected facial muscles and stimulate the facial nerve [11]. It is important that muscle re-education exercises and soft tissue techniques be implemented prior to recovery in order to help prevent permanent contractures of the paralyzed facial muscles. To reduce pain, heat can be applied to the affected side of the face [12].

The factors like *Dosha*, *Dushya*, *Prakruti* etc were not included in this study. The recipe mentioned in Bhaishajya Ratnawali was tried as it is. The mode of action of the yoga is well interpreted in the light of Vagbhatta's observation according to whom *Lasuna* is prescribed as the prime drug for the management of *Vatavyadhi* (*Lasuna Prabhanjana*). *Lasuna* plays the role of sheet anchor in managing *Vata Vyadhi* and when it is combined with *Snigdha Dravya* like *Navaneeta* the action of *Lasuna* gets potentiated. *Kukutanda Sweda* also acts as *Vatahara*.

Recent studies have revealed that garlic reduces the tendency of the blood to clot (anti-coagulant), more effectively than aspirin, and helps the body dissolve existing clots (thrombolytic), which may be useful in the management of heart attacks and strokes [13]. A good deal of evidence suggests beneficial effects of the regular dietary intake of garlic on mild hypertension and hyperlipidemia [14]. Garlic seems to have anti-microbial [15] and immuno-stimulating properties, fibrinolytic activity, and exerts favourable effects on platelet aggregation and adhesion [14]. The available evidence gives rise to the hope that the list of indications may even be considerably extended in the future.

Conclusion

In this observational case study, *Lasuna* was administered with *Navaneeta* (butter) already referred in Ayurvedic literature in a patient of *Ardita Vata* for 7 days. The signs and symptoms relieved significantly from 5th day onwards. Though this was a preliminary study, the result was highly encouraging and gives the scope to screen it further with a large sample size.

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