

SUCCESSFUL AYURVEDIC MANAGEMENT OF COMPLETE BLINDNESS DUE TO CONGENITAL BILATERAL VISUAL TRACT DYSFUNCTION-A CASE STUDY***Dr. Sarita Pradip Gaikwad**

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ABSTRACT

Congenital blindness is a significant health problem throughout the world. The prevalence of childhood blindness is reported to be 0.17%. The cause may be due to infection or non infection. Bilateral visual tract dysfunction may be one of the causes of congenital blindness. This blindness may remain permanent. **Case study:** This 3 month old female child was noticed to be blind by her parents. The child was thoroughly investigated. The Visual Evoked Potential (V.E.P) test revealed Bilateral Visual tract dysfunction. The blindness was told to be permanent. Such baby approached Ayurvedic system of Indian Medicine and within a period of one month of Ayurvedic treatment, vision was restored. **Conclusion:** This case study highlighted that such permanent congenital blindness may be cured by Ayurvedic line of treatment.

KEYWORDS: Congenital blindness, Bilateral Visual tract dysfunction, Visual Evoked Potential test, *Janmajat Andhatva*.

Congenital blindness is considered to be significant health burden among the community. Blindness causes adverse impact on growth, physical and social development.^[1] Prevalence of Childhood blindness is reported to be 0.17% in India. It is estimated that there are 1.4 million blind children in the world, two thirds of whom live in the developing countries.^[2]

Infectious causes of congenital blindness may be summarized as: CMV – infection, congenital rubella syndrome (with congenital cataract), congenital toxoplasmosis, congenital syphilis and rare mixed syndrome (anophthalmia, microphthalmia, etc).

The non infectious causes included the following: retinitis pigmentosa, retinopathy of prematurity, primary congenital glaucoma, Leber's hereditary optic neuropathy, congenital strabismus and rare mixed syndrome.^[1]

The visual pathway transmits signals from retina to the visual cortex through a battery of structures i.e., Optic nerve, Optic Chiasm, Optic tract, Lateral geniculate nucleus and optic radiations; lesions of visual pathway may lead to visual disturbances or loss of vision.^[3,4] Visual Evoked Potential test is usually applied to know the proper functioning of Visual pathway. VEP test

measures the integrity of the optical pathway from retina to the occipital lobe of the brain. Visual Evoked Potential/Response (VEP/VER) measures the electrical signals generated at the visual cortex in response to visual stimulation.^[5]

CASE STUDY

This 3 month old female baby was noticed by her parents that she was blind. They approached the Ophthalmologist of Sassoon General hospital, Pune. There was inability to fix noted. On fundoscopy, her retina was found to be normal but to distinguish if there was some defect in the integrity of visual pathway; she was referred to another hospital for getting V.E.P. test done. The same test was done on 21.10.2015 and her N 75, P 100 and N 145 latencies were assessed. It was commented by Paediatric neurologist that P 100 latencies were prolonged and it was concluded that there was evidence that there was Bilateral Visual tract dysfunction. (Report attached -Fig No.3). Her mother again approached the Ophthalmologist of Sassoon General hospital, Pune and was informed that there was no active management left from Ophthalmology side, and as the vision loss of the baby was congenital and there was permanent vision loss, for which there was no cure in Modern science. Mother was in a state of mental shock and agony, when a female employee from

Ayurved Research Ward in Sassoon General hospital referred the baby to the Author in Ayurved OPD on 23.10.2015.

The case was examined In Ayurved OPD: Age-3 months, Wt.-4.8 Kg. Full Term Normal Delivery. Birth Wt-3Kg. 2nd child in order. 1st child-2 year old female, normal vision and healthy.

Pulse-110/min; Respiratory rate- 24/min

Appetite-Normal, Bowel habits normal, Passing of Urine-Normal. Sleep-Normal

No response to light and sound ++++

Other systems-Nothing abnormal detected.

Nidan/ Diagnosis: *Janmajat Andhyatwa* (Congenital blindness)

Treatment:-The baby was breast feeding, hence treatment to mother was also advocated and for the baby as well. To mother: 1. Sitopaladi Choorna ½ TSF along with honey or warm water before food thrice daily.

2. Aam Pachak vati 1 BD.

3. A quath made from coarse powder of Maka (*Eclipta prostrata*), Punarnava (*Boerhaavia diffusa*), Palash (*Butea monosperma*) one cup twice daily was advocated to the mother.

To baby: 5 drops twice daily of the same quath mentioned above.

Response to treatment

There was some improvement in the vision within 15 days of the treatment and complete improvement within one month of treatment. Child could see and hear too. A video was filmed to confirm the findings.

DISCUSSION

Vision is established when signals from retina pass through whole visual pathway to occipital lobe i.e. visual cortex. If there is break in to the continuity of visual pathway at various levels, normal vision cannot be established as may be seen in the image No.1 given.^[6] In the present case, retina was completely normal as established by funduscopy examination but there was gross Visual tract dysfunction observed in V.E.P. test. Tandon et al observed that Normal P latency value in female children is limited to 91.07 ± 7.4 ^[7] while Ruby Sharma et al reported the same in the range of 88.31 ± 8.799 .^[8] The P latency value observed in the present case was much prolonged as seen from the Fig No.2 VEP test report (report attached). Therefore opinion of the test was Bilateral Visual tract dysfunction. The dysfunction being congenital, there was no remedy available in Modern science. In such a case if Ayurvedic intervention was not done on time, the child would have permanently remained blind. Thus Ayurved was successful in restoring vision of a case who had practically lost vision.

In Ayurved, Netra/Eye is the part of *Indriyavah strotas*. The baby had congenital blindness. It is always not true that congenital disease is due to malformations in *Beej*, i.e. ovum and sperm. It is found that faulty diet and faulty practices in pregnancy may effect changes in the intrauterine foetus leading to certain diseases or disorders in the foetus. As said by Sushrucharya in following verse:

....**Janmabalprarutta ye Maturupcharat Pangujatyandhya-Badhir-Muka Minmin vaman prabhutyo jayante; Te-Api Dwividhah-Raskrutah, Dauhridapcharkritascha**^[9] **I Sushrut Sutra sthan 24/5**

Hereditary anomalies occur due to malformations in ovum and sperm, while Congenital anomalies may occur due to improper Antenatal care and the anomalies may reflect as *Pangu* (lame), *Badhir* (deaf), *Muka* (dumb), *Andha* (blind), *Minmin* (nasal twang in voice), *Vaman* (Short stature-impaired growth/Dwarf). That too have two causes: Dietary indiscretions (*Rasakrit*) and due to *Dauhrid apchar* (Unhealthy practices in pregnancy).

We have used Maka (*Eclipta prostrata*), Punarnava (*Boerhaavia diffusa*), Palash (*Butea monosperma*). Let us see its pharmacological benefits in Ayurved point of view.

Maka/Bhringraj (Eclipta prostrata):- It is *Tikta rasatmak*, having *Ushna and Ruksha guna*; especially beneficial in *Meda, Asthi and Majja dhatu*. Wherever there is putrefaction, and there is obstruction or *Avarodh* to functioning of *Prakruta dhatu*, Maka acts very effectively.

Bhringrajastu Chakshushyastiktokshanah Keshranjanah II Kushta Netra Shirotirnuti^[10] **II Bhavprakash Naktyandhye Keshyarajah Keshrajanvitam Siddham Matsyandam hanti bhakshitam I Naktyandhyam Niyatam Nrunam Saptahat Patthyasevinam II Netrachikitsa Chakradatta.**

Punarnava (Boerhaavia diffusa) is *Tikta rasatmak*, having *Ushna and Ruksha guna*; produces new tissues due to its rejuvenating effect. The treatment of Eye diseases is of two types; one that increases the strength of the deficient element and second one that removes the defective element. Punarnava acted in both ways, thereby restoring the balance. It is well documented in Ayurved that Punarnava restored vision in blind persons. Bhav prakash Nighantu, a classical book mentioned it in following verse:

Punarnava Tu Viryoshna Bhedini Cha Rasayani I Kaphanilamdurnambraghna Shothodarapaha II Rajvallabh

In the following verse uses of Punarnava in Eye diseases have been mentioned:-

Dugdhen Kandu Kshodren Netra Stravachcha Sarpisha^[11] I

Pushpam Tailen Timiram Kanjiken Nishandhtam II Bhav prakash Nighantu Madhya Khand Chapter 4.

Punarnava+ Milk- *Netra-kandu* (Itching of eyes)

Punarnava+Honey- *Netra-strav* (Eye discharge)

Punarnava+ Ghrita - *Motibindu* (Cataract)

Punarnava+ Tail- *Timir rog*

Punarnava + Kanji- *Nishandhatva* (Night blindness)

Palash (*Butea monosperma*):- It is *Kashay rasatmak* having *Ushna guna*. It has *Raktavardhak* and *Agnivardhak* properties. Due to its *Deepaniya* effect, *Jatharagni* is facilitated. Its special effect is all 5 sense organs (*Dnyanedriyas*) including eyes. It might have also cured the deafness, to which Modern science did not given proper attention.

Palashmoolo swaraso Netra Chhayanandhya Pushpajita^[12] I

Pittabhishyande Palash Shonitam Palashansyaa Chhonitam Chanjanartha.... II

(Netra-rogadhih)

Quath made up of roots of Palash will be effective in treating *Netrachhaya* (Blurred vision), *Netra-Andhatva* (Blindness) and *Netra-Pushpa* (Cataract).

Combined use of these 3 important herbs produced the desired effect and removed the obstruction at Visual tract level; thereby restoring the visual loss as well as sense of hearing.

It is remarked with proud that Ayurved has shown wonders where there was no hope of cure. Ayurved has restored vision in such a hopeless case in Modern science point of view.

Visual Field Defects

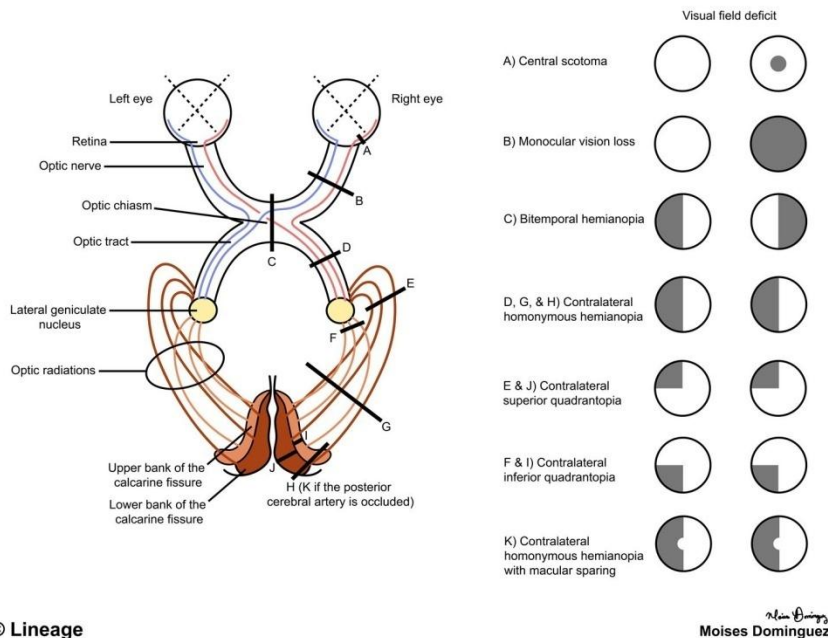


Image copied with courtesy of goggle.com
Figure No. 1: Visual pathway & Visual field defects.

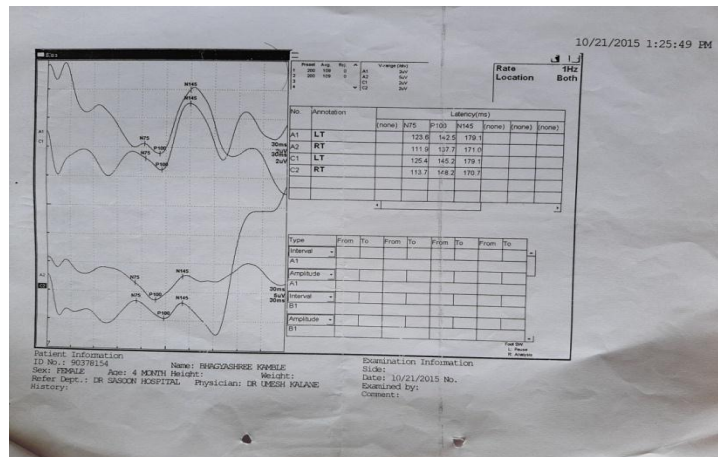


Fig No. 2: Showing graphical form of VEP test.

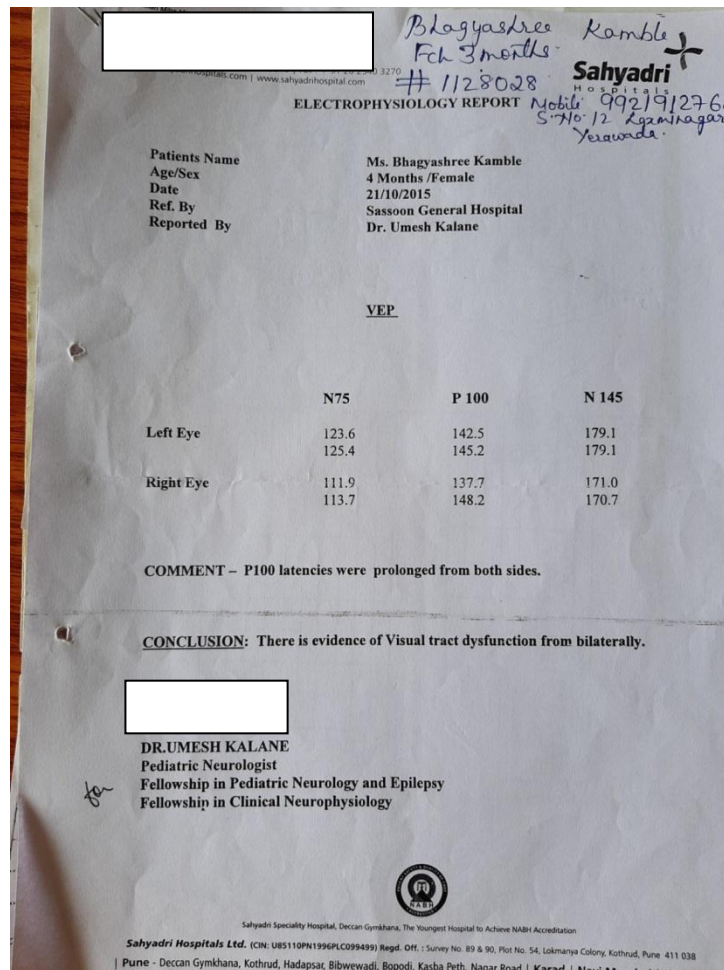


Figure No. 3: VEP test.



Fig No. 4: Vision restored: Baby with mother.



Fig No. 5: Follow up at 3 years.

CONCLUSION

Ayurved is very effective in restoring the vision in congenital blindness.

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