

## Case Study

## Ayurvedic management of papilledema

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## Abstract

The term *Shotha* ordinarily means a swelling which may be because of inflammatory process in any part of the body or may be general, due to causes other than inflammatory. A diagnosed case of papilledema (*Kapha-Pittaja Drishti Nadi Shotha*) was treated on the lines of *Shotha Chikitsa*. The patient was given *Dashamoola* and *Punarnavashtaka Kwatha* internally and locally *Nasya* and *Takradhara* for 3 months. At the end of 3 months, papilledema completely regressed. Follow-up of the patient for more than 3 years, no recurrence has been reported.

**Key words:** *Nasya*, papilledema, *Shotha*, *Takradhara*

## Introduction

The term *Shotha* ordinarily means a swelling which may be because of inflammatory process in any part of the body or may be general, due to causes other than inflammatory.<sup>[1]</sup> *Shotha* occurring any part of the body may occur as either *Swatantra Vyadhi* (primary) or *Paratantra* (secondary) condition. It may also occur as a symptom of other diseases. Keeping this concept of *Shotha* in view, papilledema can be considered *Drishti Nadi Shotha* which may be primary or secondary.

The term papilledema and disc edema look alike, and *per se* means swelling of the optic disc.<sup>[2]</sup> However, arbitrarily, the term papilledema has been reserved for the passive disc swelling associated with increased intracranial pressure, which is almost always bilateral although it may be asymmetrical. If not treated in time, this condition can lead to optic atrophy and loss of vision that is *Sannimitaja Linganasha*,<sup>[3]</sup> due to *Shiroabhitapa* or raised intracranial pressure. In this case study, a female patient of papilledema presented with *Kapha-Pitta* predominant symptoms that is, blurring of vision, heaviness in both eyes (BEs), mild pain in left eye, and signs of papilledema. Patient was diagnosed as bilateral papilledema, more in the right eye than the left eye. In ayurvedic parlance, this case had been diagnosed as *Kapha-Pittaja Drishti Nadi Shotha*.

## Case Report

A female patient aged about 53 years visited outdoor patient Department of Shalakya Tantra, IPGT and RA Hospital, Jamnagar,

presenting with complaints of blurring of vision, heaviness in the head and BEs throughout the day with associated complaints of mild pain in the left eye. For these complaints, patient had undergone treatment by an eye surgeon and was provisionally diagnosed as benign raised intracranial pressure with a normal report of magnetic resonance imaging - brain, presenting with bilateral papilledema (comparatively more in the right than left eye). Patient was on tablet Diamox 250 mg (acetazolamide twice a day), but patient complained generalized weakness after taking this tablet. Even after taking tablet Diamox, patient had persistent heaviness in head and mild pain in the left eye. Hence, patient wanted to discontinue it and thus, came for ayurvedic treatment. In the past history, it is a known case of hypertension since 8 years on antihypertensive (tablet Amlovas 50 mg once a day), and blood pressure was under control. Further suffering from diabetes mellitus since 6 years and on oral antihyperglycemic agent (tablet Glyciphage 500 mg), blood sugar level was - fasting 125 mg% and postprandial 151 mg%.

There was no history of severe headache or nausea or vomiting or neurological deficit.

## On examination

## Visual status

- Distance vision acuity (DVA) - 6/6 BEs, Near Vision (NV) - N/6 BE

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- Intraocular pressure (IOP) -15.9 mmHg BE
- Third, fourth, and sixth cranial nerve in BEs were normal
- Slit lamp examination - no keratitis, no iritis
- Pupil - no afferent pupillary defect.

#### Fundii disc

- Right eye - moderate papilledema
- Left eye - mild papilledema.

No papillitis/neuritis, retinal hemorrhage, retinal exudates, hypertensive retinopathy changes.

Looking into the above clinical picture, patient had been diagnosed as benign raised intracranial pressure leading to papilledema, which is painless swelling of the optic disc with hyperemia of the disc with engorged retinal vessels. From ayurvedic point of view, it was diagnosed as *Kapha-Pittaja Shotha* and treated on the line of *Shotha Chikitsa*.

The following treatment was administered:

- *Dipana Pachana* - *Ama Pachana Vati* - 2 tablet (each 500 mg) twice daily after meals for 7 days
- *Koshtha Shuddhi* - *Eranda Bhrishta Haritaki* 6 g with lukewarm water at bedtime for 7 days
- *Dosha Pratyanka Chikitsa*:
  1. *Dashamoola Kwatha*<sup>[4]</sup> and *Punarnavashtaka Kwatha*<sup>[5]</sup> each 20 ml twice daily orally on empty stomach for 3 months
  2. *Nisha Amalaki Churna*<sup>[6]</sup> 6 g twice a day orally for 3 months
  3. *Takradhara*<sup>[7]</sup> - along with internal medication three sittings of *Takradhara* were given with 7 days gap between each sitting
  4. In between two sittings of *Takradhara*, one course of *Nasya* for 7 days with *Ksheerabala Taila* (101 *Avartana*)<sup>[8]</sup> was done.

Total duration of treatment was 3 months. The patient started feeling better in blurring of vision after 1 week of start of the treatment in right eye. Slight heaviness in the left eye persisted for 15 days; after this period, patient reported gradual improvement in the heaviness of the left eye. After 1 month of treatment, a decrease in papilledema was observed. Blood sugar level was normal (within biological limit). On follow-up of more than 3 years, patient was asymptomatic; on examination, papilledema of BEs completely regressed.

#### Discussion

As mentioned by Acharya Charaka in *Vimana Sthana* in the context of *Anukta Vyadhi*<sup>[9]</sup> that, for the management of diseases which are not named in the text, the physician should use his knowledge, intelligence and try to comprehend the vitiated *Dosha* and treat it accordingly.

Though there is no definite treatment protocol in the management of benign raised intracranial pressure presenting with papilledema, with the clinical experiences, an attempt was made to treat this clinical entity on lines of *Shotha Chikitsa*. Thus, the treatment aimed at reducing the *Shotha* by administering *Shothahara* preparations such as *Dashamoola* and *Punarnavashtaka Kwatha*. Along with internal medication, the local procedure *Takradhara* (*Ruksha*, *Sheeta* quality) to

pacify *Kapha* and *Pitta Dosha* and to pacify *Vata*, *Nasya* with *Ksheerabala Taila* were planned. At the same time by giving due consideration to control diabetes, *Nisha Amalaki Churna* was administered. The patient responded well both subjectively and objectively to the treatment.

Drugs of *Dashmoola Kwatha* such as *Agnimantha* (*Clerodendrum phlomidis* Linn.),<sup>[10]</sup> *Shyonaka* (*Oroxylum indicum* Vent.),<sup>[11]</sup> *Gambhari* (*Gmelina arborea* Linn.),<sup>[12]</sup> and *Bilwa* (*Aegle marmelos* Corr.)<sup>[13]</sup> are proven to be best for their anti-inflammatory activity, and drugs of *Punarnavashtaka Kwatha* such as *Punarnava* (*Boerhavia diffusa* Linn.),<sup>[14]</sup> *Haritaki* (*Terminalia chebula* Retz.),<sup>[15]</sup> and *Gomutra* (cow urine)<sup>[16]</sup> are having antioxidant, diuretic, anti-inflammatory as well as antimicrobial properties. *Nisha Amalaki Yoga* is very commonly used drug for controlling blood sugar, and *Harida* (*Curcuma longa* Linn.),<sup>[17]</sup> as well as *Amalaki* (*Embllica officinalis* Gaertn.),<sup>[18]</sup> both are known for their free radical scavenging and antioxidant activity.

#### Conclusion

New ocular disorders, for example, papilledema which is not described in ancient texts can be understood by following the guidelines given in the context of *Anukta Vyadhi* and can be successfully managed by analyzing the vitiated *Doshas* based on the signs and symptoms. The entity papilledema can be considered *Kapha-Pitta* predominant *Drishhti Nadi Shotha* and managed by following the treatment prescribed for *Shotha*.

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#### Conflicts of interest

There are no conflicts of interest.

#### References

1. Acharya YT, editor. Charaka Samhita of Agnivesha, Sutrasthana. Reprint Edition. Ch. 18, Ver. 5. Varanasi: Chaukhambha Orientalia; 2011. p. 106.
2. Khurana AK. Neurophthalmology. In: Comprehensive Ophthalmology. 4th ed. New Delhi: New Age International (P) Limited Publication; 2007. p. 319-22.
3. Acharya JT, editor. Sushruta Samhita of Sushruta, Uttaratantra. 8th ed., Ch. 7, Ver. 42. Varanasi: Chaukhambha Orientalia; 2005. p. 609.
4. Krishna KV, editor. Sahasrayoga, Kashaya Kalpana. 25th ed. Alleppy: Vidyarmbha Publication; 2004. p. 34.
5. Vidyasagar PS, editor. Sarangdhara Samhita of Sarangdhara, Madhyama Khanda. Reprint Edition. Ch. 2, Ver. 76-7. Varanasi: Krishnadas Academy Publication; 2000. p. 154.
6. Paradakar HS, editor. Astanga Hridaya of Vagbhatta, Uttarasthana. 9th ed. Ch. 40, Ver. 48. Varanasi: Chaukhambha Orientalia Publication; 2005. p. 943.
7. Krishna KV, editor. Sahasrayoga, Dhara Kalpa. 25th ed. Alleppy: Vidyarmbha Publication; 2004. p. 475.
8. Krishna KV, editor. Sahasrayoga, Taila Yoga. 25th ed. Alleppy: Vidyarmbha Publication; 2004. p. 315.
9. Acharya YT, editor. Charaka Samhita of Agnivesha, Vimanasthana. Reprint Edition. Ch. 4, Ver. 6. Varanasi: Chaukhambha Orientalia; 2013. p. 248.
10. Rathore RS, Prakash A, Singh PP. *Premna integrifolia* Linn., A preliminary study of anti-inflammatory activity. Rheumatism 1977;12:130-4.
11. Doshi K, Ilanchezhian R, Acharya R, Patel B R, Ravishankar B. Anti-inflammatory activity of root bark and stem bark of *Shyonaka*. J Ayurveda Integr Med 2012;3:194-7.
12. Barik BR, Bhowmik T, Dey AK, Patra A, Chatterjee A, Joy SS. Premnazole an isoxazole alkaloid of *Premna integrifolia* and *Gmelina arborea* with

- anti-inflammatory activity. *Fitoterapia* 1992;63:295-9.
13. Pitre S, Srivastava SK. Pharmacological, Microbiological and phytochemical studies on the roots of *Aegle marmelos*. *Fitoterapia* 1987;58:194.
  14. Awasthi LP, Verma HN. *Boerhaavia diffusa* – A wild herb with potent biological and antimicrobial properties. *Asian Agrihist* 2006;10:55-68.
  15. Singh MP, Sharma CS. Wound healing activity of *Terminalia chebula* in experimentally induced diabetic rats. *Int J Pharm Technol Res* 2009;1:1267-70.
  16. Edwin J, Edwin S, Tiwari V, Garg R, Emmanuel T. Antioxidant and antimicrobial activities of cow urine. *Glob J Pharmacol* 2008;2:20-2.
  17. Sreejayan N, Rao MN. Free radical scavenging activity of curcuminoids. *Arzneimittelforschung* 1996;46:169-71.
  18. Katiyar CK, Brindavanam NB, Tiwari P, Narayana DB. Immunomodulator products from Ayurveda: Current status and future perspective. In: Upadhyaya SN, editor. *Immunomodulation*. New Delhi: Narosa Publishing House; 1997. p. 163-87.

## हिन्दी सारांश

### पेपिलोडिमा की आयुर्वेदीय चिकित्सा-रोगी पत्र

मंजुषा राजगोपाल, जी. गोपिनाथन

पेपिलोडिमा (कफपित्तज दृष्टिनाड़ी शोथ) का पूर्व निदान किए हुए रोगी की चिकित्सा शोथ चिकित्सा सिद्धान्त के आधार पर की गई। रोगी को दशमूल क्वाथ और पुनर्नवाहक क्वाथ आभ्यान्तर प्रयोग के लिए दिया गया और स्थानिक चिकित्सा में नस्य एवं तक्रधारा की गई। कुल तीन मासावधि के लिए चिकित्सा दी गई। तीन मास पूर्ण होने के बाद रोगी को दृष्टिनाड़ी शोथ में पूर्ण लाभ की प्राप्ति हुई। और उसे तीन वर्ष अवधि पर्यन्त पुनः परीक्षण पर रोग की पुनरोत्पत्ति नहीं हुई है।