

A Successful Management of Hyperuricaemia Through *Ayurveda* Medications: A Case Series

Preeti Choudhary,^{1*} Naresh Jain²

¹ M.D. Scholar, ² Reader, Department of Kayachikitsa, Govt. (auto.) Dhanwantari Ayurveda Medical College, Ujjain, M.P., India

Abstract:

Uric acid is a heterolytic compound of Carbon, Nitrogen, Oxygen and Hydrogen which is produced by the metabolism breakdown of purine nucleotides. Elevated level of uric acid in blood is called hyperuricemia. This condition arises due to over production or under secretion of uric acid. High blood concentration of uric acid can lead to Gout and are associated with other medical conditions. In *Ayurveda* science *Vaatarkta* disease is described which having similarities to the conditions of hyperuricemia, So hyperuricaemia can be correlated with *Vaatarakta* as *Ayurveda* perspective. In this case series, three cases of Hyperuricaemia were treated with *Navakarshika ghana vati* - 250 mg x2 TID after meal for one month with *Kashyam* and *Amrutadi tailam*-10ml OD with 100ml lukewarm water or milk on empty stomach for one month, gets very effective & quick response in hyperuricaemia. Both are pacified and normalised the level of uric acid. Also didn't found any adverse drug reaction of both medicines.

Keywords: *Amrutadi tailam*, *Ayurvedic Treatment*, Case Series, Hyperuricemia, *Navakarshika ghana vati*, *Kashayam*.

Received: 02.07.2021 Revised: 27.08.2021 Accepted: 20.09.2021 Published: 28.09.2021

Quick Response code



*Corresponding Author:

Dr. Preeti Choudhary

M.D. Scholar, Department of Kayachikitsa, Govt. (auto.) Dhanwantari Ayurveda Medical College, Ujjain, M.P., India

E-mail: drpreetimd89@gmail.com

Introduction:

Uric acid is a heterolytic compound of Carbon, Nitrogen, Oxygen and Hydrogen with formula; $C_5H_4N_4O_3$. This is a product of the metabolism breakdown of purine nucleotides. Hyperuricaemia word is derived from Hyper + uric + emia. It means increasing level of uric acid in blood which is characterized by elevation of serum uric acid concentration above 7mg/dl. ^[1] Hyperuricaemia may classify into 02 types; metabolic and renal; each of which may be primary or secondary. Primary refer to cases in which the underlying biochemical defect causing hyperuricaemia is not known while secondary denotes case with known cause of hyperuricaemia. ^[2] This condition arises due to over production or under secretion of uric acid depending on the amount of uric acid excreted during 24 hours of period. Excessive dietary intake of purines can contribute to hyperuricaemia in both condition overproduction & under secretion. ^[3]

High blood concentration of uric acid can lead to out and are associated with other medical conditions including Diabetes and the formation of ammonium acid urate kidney stone. ^[4] But elevation of serum uric acid is not sufficient for the diagnosis of gout. Only 10% of patients with hyperuricaemia develop gout. some unknown factors pre-disposes patients to urate deposition and articular inflammation in the setting of sustained hyperuricaemia. ^[5]

In *Ayurveda* science hyperuricaemia word is not found but *Vaatarakta* is described as an independent disease. ^[6] *Vaatarakta* disease is narrated under the *Vaata vyadhi* ^[7] as well as *Rakta aashraya roga*. ^[8] The causes, pathogenesis and clinical features of hyperuricemia and *Vaatarakta* having similarities. So the hyperuricaemia can be correlated with *Vaatarakta* as *Ayurveda* perspective. The line of treatment of *Vaatarakta* is *Snehapana*, *Rakatamokshana*, *Mrudu virechana*, *Bastikarma*, *Abhyanga*, *Parisechana* etc. as well as *Vaatahara* and *Rakta-shodhaka Ahara* and *vihara*. ^[9]

Case History:

Case 01. Presentation: A 50 years old male patient presented on 22/01/2021 at O.P.D. of Kayachikitsa department of Dhanwantari Ayurvedic hospital, Ujjain, (M.P.) with chief complaint of moderate pain and burning sensation in both feet specially in Meta-torso-phalangeal joints since one month. Patient brought the blood report dated 07/01/2021 showing elevated serum uric acid level; - 09.57 mg/dl. He had no past history of renal calculus etc. But he had family history of osteoarthritis in mother and heart disease in father.

Case 02 Presentation: A 59 years old female patient arrived on 01/03/2021 O.P.D. with chief complaint of moderate pain & swelling in feet and hands along with burning sensation since last 3 months also felt weakness since 15 days. The Blood report dated 22/2/2021 denotes elevation of serum uric acid level; - 09.94 mg/dl. She had suffering from cervical spondylosis since last two years. There is no family history of any disease. On general examination she had pallor conjunctiva and mild coated tongue.

Case 03 Presentation: A male patient aged 69 years visited O.P.D. on 17/03/2021 with chief complaints of severe pain, redness & burning sensation in great toe of both feet since one month. Also having tophi formation on both feet with history of Gout since last two years and also having suffering from DM type 1 since four years and HTN since last 10 years as well as family history of Gout. The patient brought a blood investigation report dated 25/02/2021 Showing raised uric acid level; - 09.55 mg/dl.

Methodology / Treatment given:

Medicine has been prepared at mini pharmacy of Govt. (auto.) Dhanwantari Ayurvedic college, Ujjain. All cases have been treated at O.P.D. of Kayachikitsa department of Dhanwantari Ayurvedic hospital, Ujjain, (M.P.) and also take consent of the patients before this clinical trial. During the treatment follow-up have been done in every 07 days of each patient.

Table-1: Demographic data of presented cases:

| Data | Case 01 | Case 02 | Case 03 |
|-------------------|---------------------------------------|-------------------------------------|-------------------------|
| Name | ABC | XYZ | 123 |
| O.P.D. no. | 2101 | 4566 | 7882 |
| DOA | 22/01/2021 | 01/03/2021 | 17/03/2021 |
| Age | 50 Y | 59 Y | 69 Y |
| Sex | M | F | M |
| Marital status | Married | Married | Married |
| Occupation | Business man | House wife | Retired teacher |
| Diet & Habits | Vegetarian | Vegetarian | Vegetarian |
| Appetite | Less | Poor | Excessive |
| Sleep | Regular | Irregular | Irregular |
| Bala | Madhyam | Madhyam | Madhyam |
| Addiction | None | Tea | Tea |
| Family history | Mother – O.A. Father–heart disease | Not significant | Mother – Gout |
| Past history | Ankle joint fracture ;1 month ago | Cervical Spondylosis; 2years ago | HTN - 2004 DM - 2012 |
| Treatment history | Fresh case | Previous T/t - Ayurvedic | Previous T/t-Ayurvedic |

Table-2: General Examinations:

| Data | Case 01 | Case 02 | Case 03 |
|-----------------------|------------------------------|--|---|
| Height | 5'6 inches | 5'0 inches | 5'4 inches |
| Weight | 99 kg | 56 kg | 85 kg |
| Icterus | Absent | Absent | Absent |
| Cyanosis | Absent | Absent | Absent |
| Clubbing | Absent | Absent | Absent |
| Lymph node | Not enlarged | Enlarged | Not enlarged |
| Neck veins | Not prominent | Prominent | Not prominent |
| Oedema | Unilateral feet - ++ | Bilateral feet - +++ Bilateral hand - ++ | MTP Joint & great Toe of both legs - +++ |
| B.P. | 126/82 mm of Hg | 132/84 mm of Hg | 144/90 mm of Hg |
| Pulse | 70/minutes | 68/minutes | 62/minutes |
| R.R. | 16/minutes | 18/minutes | 16/minutes |
| Temperature | 98.4 ⁰ F | 98.6 ⁰ F | 98.6 ⁰ F |
| Discoloration of skin | Absent | Absent | MTP Joints - Redness on skin |
| Advice investigations | CBC, CRP, S. uric acid | CBC, CRP, S. uric acid | CBC, CRP, S. uric acid |
| Treatment given | Navakarshika ghana vati | 01.Navakarshika ghana vati 02. Amrutadi Tailam | 01.Navakarshika ghana vati 02.Amrutadi Tailam |
| Treatment duration | 40 days | 04 months 12 days | 23 days |

Table -3: Given Treatment:

| Name of Medicines | Dose | Sevanakaala | Anupaana | Duration |
|-------------------------|--------|--------------------------------------|-----------------------------|---|
| Navakarshika Ghana Vati | 250 mg | Two tab three times a day after meal | 100 ml Navakarshika Kashyam | Case 1.-40 days, Case 2.-4 months, 12 days, Case 3.-23 Days |
| Amrutadi Tailam | 10 ml | Once daily with empty stomach. | 100 ml of Luke warm water | Case 2.-4 months, 12 days, Case 3.-23 Days |

Table-4: Pathological changes in investigations before & after treatment

| Parameters | Case 01 | Case 02 | Case 03 |
|----------------|------------|--------------------------|--------------------------|
| Investigations | BT | AT | BT |
| CBC | HGB | 13.0 g/dl | 11.6 g/dl |
| | RBC | 4.57 10 ⁶ /μl | 4.48 10 ⁶ /μl |
| | WBC | 6.34 10 ³ /μl | 7.50 10 ³ /μl |
| | LYM | 2.37 10 ³ /μl | 2.40 10 ³ /μl |
| | PLT | 457 10 ³ /μl | 237 10 ³ /μl |
| CRP | Negative | Negative | Positive |
| S. Uric Acid | 9.57 mg/dl | 6.3 mg/dl | 9.94 mg/dl |
| | | | 5.0 mg/dl |
| | | | 9.55 mg/dl |
| | | | 7.0 mg/dl |

Table -5: Ingredients of Navakasrshika ghana vati and Kashayam

| Ingredients | Botanical name | Family | Mode of action |
|-------------|----------------------------------|------------------|--|
| Haritaki | <i>Terminalia chebula</i> Linn | Combrataceae | Shothahara, Vednasthapana, Shonitasthapna |
| Vibhitaki | <i>Terminalia belerica</i> Linn | Combrataceae | Vedanasthapaka, Raktastambhaka |
| Amalaki | <i>Embalica officinalis</i> Linn | Euphorbiaceae | Dahaprashamana, Shonitasthapana, Rasayana, Medhya |
| Nimba | <i>Azadirachta Indica</i> Linn | Meliaceae | Rakta shodhaka, Kandughna, Kushthaghna, Dahaprashamana, Vruna ropaka |
| Manjishtha | <i>Rubia Cordifolia</i> Linn | Rubiaceae | Rakta prasada, Shothahara, Raktashodhaka, Stanyashodhaka, Vrunaropaka, Kushthaghna |
| Vachaa | <i>Acorus calomus</i> Linn | Araceae | Kanthya, Medhya, Shothhara, Vednasthapana, Sanghya sthapana |
| Kutaki | <i>Picrorhiza kurroa</i> Linn | Scrophulariaceae | Shothahara, Raktashodhaka, Stanyashodhaka Dahaprashamana |
| Guduchi | <i>Tinospora cordifolia</i> Linn | Menispermaceae | Kushthaghna, Vedanasthapana, Raktashodhaka |

| | | | |
|-------------|---------------------------|---------------|---|
| Daruharidra | Berberis aristata Linn | Berberidaceae | Shothahara, Vedanasthapana, Vranashodhana, Vranaropana, Raktashodhaka |
|-------------|---------------------------|---------------|---|

Pathya:

- Drink normally 200 ml water in every hour at day time.
- Old cereals; wheat & rice etc.
- Pulses; Green gram lentils take with added cow ghee in sufficient quantity.
- Vegetables; Bitter guard, pointed guard, Bottle guard, Sponge guard, Indian squash, Ladies finger, Drumstick etc.
- Cream less Milk, Butter milk.
- Seasonal fruits & Juice, Tomato, Carrot, Cucumber, Beetroot etc.

Apathya:

- Ushna Padartha (Hot Food materials)
- Snigdha Padartha (Unctuous)
- Guru Ahara (Heavy Food materials)
- Abhishyandi Ahara (Channel Blocking Diet)
- Picchila Ahara (Sticky food items)
- Pistanna Ahara (white flour prepared food)
- Payasa Ahara (Milk prepared food)
- Diwa – Swapna (Day time sleep)
- Agni Santapa (Exposure to heat)
- Atapa Sevana (Exposure to Sunlight)
- Krodha (Anger)
- Ati Vyaayama (Physical Exertion)
- Maithuna (Sexual Activities)
- Viruddhahara (Incompatible food combinations)
- Vegavarodha (Suppressing of natural urges)

Result and Discussion:

Navakarshika ghana vati with Kashyam and Amrutadi tailam gets very effective & quick response in hyperuricaemia. Both are pacified and normalised the level of uric acid also increased Hb % with minor variations in CBC. About 70 – 85% of symptoms subsides in all cases. Also didn't found any adverse drug reaction of both medicines.

Navakarshika ghana vati & Kashyam:

Navakarshika Kashyam is explained in different Ayurvedic literatures i.e. Bhaisjya Ratnawali,^[10] Bhavaprakasha,^[11] Chakradutta^[12] also in Sharangdhar Samhita with the name of Laghu-manjishthadi kashayam^[13] having 09 contents in an equal proportion of one Karsha pramana so it's known by the name of Navakarshika Kashyam.^[14] In this clinical trial Navakarshika Kashyam is mainly used in the form of ghana vati and Kashyam preparation is used as the Anupana of ghana vati.

Amrutadi tailam: Acharya Charaka has explained Amrutadi tailam in Vaatarakta chikitsa. It has 36 Ayurvedic drugs which is prepared with godugdha as well as Tila taila.^[15]

Mode of action:

Amruta or Giloy is one of the best drug which used for vatarakta, it has rakta shodhaka (blood purifier) and Tridosha shamaka properties. Laghu Panchmoola; Shalaparni, Prashniparni, Brihati, Kantakari, Gokshura are Balya, vata pitta shamka. Punarnava is a main diuretic drug having deepana (appetizer) & shothahara (anti-inflammatory) properties.

Jeevaneeya Gana has Balya, Sheetaveerya & pittashamaka properties.

Guduchi, Punarnava, rasna, Eranda moola Kulattha Kashmarya fruit Tej patra, Aguru, Tagar and Kootha; These drugs are Ushna veerya, so helpful in vatashamana by suppressing saratva and sukshmatva guna of vata.

Yashtimadhu, Balaa Jeevaneeya gana, Rakta Chandan, Ela, Godugdha, Kharsa, all these are sheetavirya drugs that's rakta shamaka and pittashamaka karma. These suppressed dravtva and saratva guna of rakta so these trial drugs have been selected.

Conclusion:

Ayurvedic treatment is very immensely effective as well as capable to subside other symptoms in the case of hyperuricaemia. The present case series provides prominent evidences that *Navakarshika ghana vati* with *Kashyam* and *Amrutadi tailam* have a potential to normalised uric acid level. The Ayurvedic medicines utilised in the above discussed cases have not presented any side effects as well.

Consent of patients: The written informed consent has been taken from the patient before starting the treatment as well as for the publication of data without disclosing the identity.

Acknowledgement: We thank all anonymous referees for their useful suggestions.

References:

1. Myers Allen R., National Medical series for independent study Medicine, Indian edition by B.I. Publications Pvt. Ltd., 5th edition, 2005, P-591.
2. Harsh Mohan, Textbook of Pathology, Jaypee Brothers Medical Publisher (P) Ltd, 6th edition, 2010, P-854.
3. Myers Allen R., National Medical series for independent study Medicine, Indian edition by B.I. Publications Pvt. Ltd., 5th edition, 2005, P-591.
4. <https://en.m.wikipedia.org> accessed on 12.6.2021
5. Myers Allen R., National Medical series for independent study Medicine, Indian edition by B.I. Publications Pvt. Ltd., 5th edition, 2005, P-591.
6. Shukla V. Tripathi R. Charaka Samhita of Agnivesa vol.2, Chikitsa Sthana, 29/1, Chaukhambha Sanskrit Pratishthan, Delhi, reprinted:2012, P-730.
7. Sharma A.R. Sharma P.V. Sushruta Samhita of Maharsi Sushruta vol.1, Nidana Sthana, 01/41-50, Chaukhambha Surbharati Prakashan, Varanasi, Reprinted:2012, P-462.
8. Shukla V. Tripathi R. Charaka Samhita of Agnivesa vol.2, Chikitsa Sthana, 24/12, Chaukhambha Sanskrit Pratishthan, Delhi, reprinted:2012, P-323.
9. Shukla V. Tripathi R. Charaka Samhita of Agnivesa vol.2, Chikitsa Sthana, 29/41, Chaukhambha Sanskrit Pratishthan, Delhi, reprinted:2012, P-737.
10. Shastri A. Bhaisjya Ratnawali of Shri Govind Das, Chapter- 27, Sloka-14-16, Chaukhambha Prakashan, Varanasi, 18th edition 2019, P-590.
11. Mishra B.S. Bhvaparakasha of Shri Bhava Mishra vol.2, Chikitsa Prakarana- 29/57-61, Chaukhambha Sanskrit Bhawan, Varanasi, Reprinted:2018, P-311.
12. Tripathi I. Chakradatta of Sri Chakrapanidatta, 23/20-23, Chaukhambha Sanskrit Bhawan, Varanasi, Reprinted:2019, P-160.
13. Tripathi B. Sarangadhara Samhita of Pt. Sarangadharacharya, Madhyam Khanda, 02/136 Chaukhamba Surbharti Prakashan, Varanasi, Reprinted:2008, P-153.
14. Shastri A.D. Bhaisjya Ratnawali of Shri Govind Das, Chapter -27, Sloka-14, Chaukhambha Prakashan, Varanasi, 18th edition, 2019, P-590.
15. Shukla V. Tripathi R. Charaka Samhita of Agnivesa vol.2, Chikitsa Sthana, 29/103-109, Chaukhambha Sanskrit Pratishthan, Delhi, reprinted:2012, P-743.

Conflict of interest: Author declares that there is no conflict of interest.

Guarantor: Corresponding author is guarantor of this article and its contents.

Source of support: None

How to cite this article:

Choudhary P, Jain NA. Successful Management of Hyperuricaemia through Ayurveda Medications: A Case Series. Int. J. AYUSH CaRe. 2021; 5(3):197-202.