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Case Report

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Standalone Ayurveda management of Hodgkin's lymphoma: A case report

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ABSTRACT

The abnormal and uncontrolled growth of lymphatic cells present in the lymphatic system, the lymph nodes, spleen, thymus, and bone marrow is called lymphoma. Hodgkin's lymphoma is a type of malignant growth in lymphatic tissues. Despite conventional anticancer therapy and remedy, there has been no cure for it. No direct reference to Hodgkin's lymphoma has been found in Ayurveda, although the clinical manifestations of Apachi like enlarged lymph nodes in the neck, armpits, or groin, painless swelling, and itchy skin, are similar to those seen in Hodgkin's lymphoma. A case of Hodgkin's lymphoma in a 34-year-old female who presented with multiple enlarged lymph nodes in the right supra clavicle at the neck, along with pain and swelling at site, right ear discharge, burning chest, and headache for the last two years. Biopsy confirmed it to be Hodgkin's lymphoma. The patient was treated with Arbudh hara Kashya, Kanchanar, Haridra, Gomutra, Rodhra Rasa, Tapyadi Loha, Swarna Vasant Malati, vaikrant Bhasma, Heerak Bhasma, Amritbhalatak Avaleha, Sanjivini Vati, Lavan Bhaskar Churna, Swarjika Kshara, Tablet Anacarcin, Kachnar Guggulu in form of Shamana Chikitsa. Local application in the form Kachanaradi Lepa was advised after local swedan with Arkpatra and Erandpantra. The nodular heterogeneous mass and growth on neck of the patient reduced with clinical gradation from 17 to 4 with reduction in first lymph node from 122 mm to 80 mm and in the second lymph node from 108 mm to 20 mm, while in the third lymph node reduced from 32 mm to zero with Ayurveda treatment alone. Thus, a patient with Hodgkin's lymphoma was treated with Ayurveda successfully without conventional therapy.

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1. Introduction

Lymphoma is a cancer of the lymphatic system. It develops in lymphocytes, which are a type of white blood cell. The abnormal and uncontrolled growth of lymphatic cells present in the lymphatic system, the lymph nodes, spleen, thymus gland, and bone marrow is called lymphoma. Lymphoma is classified into Hodgkin's lymphoma and non-Hodgkin's lymphoma. Hodgkin's lymphoma is a type of malignant growth in lymphatic tissues having abnormal Reed-Sternberg cells. General treatment modalities include radiation therapy, induction chemotherapy, salvage chemotherapy, and hematopoietic stem cell transplantation. The abnormal & uncontrolled growth of lymphatic cells which present in the lymphatic system is called as called Lymphoma. It is a cancer of the lymphatic system, which develops in lymphocytes. It is classified into Hodgkin's lymphoma and non-Hodgkin's lymphoma. Hodgkin's lymphoma is a type of malignant growth in lymphatic tissues having abnormal Reed-Sternberg cells. Conventional therapy include radiation, induction chemotherapy, salvage chemotherapy, and hematopoietic stem cell transplantation. Though Hodgkin lymphoma is a curable malignancy with conventional therapies, but it shows somewhat long-term toxicity.

Though a direct reference to Hodgkin's lymphoma has not been found in Ayurveda, the clinical manifestations of *Apachi* like enlarged lymph nodes in the neck, armpits, or groin, painless swelling, and itchy skin are similar [1]. Ayurveda is an alternative medical science which employs basic principles of herbal, mineral and herbo-mineral medicine to control diseases, including cancer. In this article, a successfully treated case of Hodgkin's lymphoma by Ayurveda without conventional therapy has been elaborated.

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2. Patient information

A 34-year-old female patient who was a homemaker visited the Cancer Consultation and Treatment Unit, NIA (DU) Jaipur, with multiple enlarged lymph nodes in the right supra clavicle at neck, along with swelling, neck pain, right ear discharge, and headache since last two years. The patient was diagnosed with Hodgkin's lymphoma and had not taken conventional therapy or any other alternative treatment before.

3. Clinical findings

On examination, the patient had tenderness on the right side of the neck on lymphatic swelling. Per abdomen examination showed an enlarged spleen. She had a normal menstrual and obstetric history.

4. Diagnostic focus and assessment

The diagnosis was based on clinical signs and symptoms, radiological, and histopathological Investigation.

4.1. CT scan of the neck before treatment dated 19/02/2020 showed

- Multiple, enlarged, discrete, and conglomerated, non-necrotic lymph nodes are noted in right level II, III, IV, V and VI groups.
- The largest node of size $4.5 \times 3.7 \times 4.0$ cm in right level II.
- Another enlarged lymph node noted in right level III, measuring 3.4 cm \times 3.0 cm \times 4.4 cm.
- Few reactive levels of IA and left level of IB, II and V groups of lymph nodes are noted with intact fatty hilum. The largest lymph node is of size 1.9×1.3 cm in left level II.

4.2. Histopathological Investigation showed

FNAC dated 13/1/2020 showed reactive lymphoid aspirate, which is suggestive of Hodgkin's lymphoma and biopsy dated 29/ 12/2020 revealed histological features in favour of Hodgkin's lymphoma.

4.3. Ayurvedic method of diagnosis

Based on the principles of Ayurveda, vitiation (Vikriti) of Kapha Pradhan Tridoshajanya Dosha (Kapha Dominant Tridosha), Rasa (primary circulating nutrient fluid) as a Dushya (a bodily structure which can be vitiated by aggravated dosha), Rasavaha Srotas, Sthan-Sansraya in Rasavaha srotas (channel carrying nutrient fluids) and Dushta Granth (vitiated glandular growth) in the form Sroto Dushti (vitiated channel) were found in the patient.

The clinical manifestations of *Apachi* like enlarged lymph nodes in the neck, armpits or groin, painless swelling, and itchy skin are similar to those seen in Hodgkin's lymphoma. Similarity in clinical feature of lymphoma and *Apachi* is given Table 1.

5. Therapeutic intervention

Patient was treated with Arbudh hara Kashya, Kanchanar Chhal, Haridra, Gomutra, Rodhra Rasa, Tapyadi Loha, Vaikrant Bhasma, Heerak Bhasma, Amritbhalatak Avaleha, Sanjivini Vati, Lavan Bhaskar Churna, Swarjika Kshara, Tablet Anacarcin, Kachnar Guggulu in form of Saman Chikitsa. Local application in the form Kachnaradi Lepa was advised after local swedan with Arkpatra and Erandpantra. Ayurvedic treatment given to the patient mentioned Table 2.

6. Observation

In patient of Hodgkin's lymphoma, the clinical improvement has found in enlarged lymph nodes, swelling, fatigue, fever, excessive sweats and itchy skin clinically with reduction in clinical gradation from 17 to 4. The nodular heterogeneous mass and growth on neck has found reduced radio logically in first Lymph node from 122 mm to 80 mm and in the 2nd lymph node from 108 mm to 20 mm, while in the 3rd lymph node it reduced from 32 mm to 0 mm (Tables 3–5).

7. Discussion

In Ayurveda texts, although no direct references to Hodgkin's lymphoma are found, the clinical manifestations are somewhat similar to *Apachi*. Hodgkin's lymphoma can be diagnosed on the basis of *Dosha*, *Dushya*, *Srotas* and *Srotodushti*. Based on the principles of Ayurveda diagnostics (Vikriti) of Kapha Pradhan Tridoshajanya Dosha, Rasa as a Dushya, Rasavaha Srotas, Sthan-Sansraya in R. srotas and Dushta Granth in the form Sroto Dushti was found in the patients. The patient was treated with Arbudhhara Kashya, Kanchanar, Haridra, Gomutra, Rodhra Rasa, Tapyadi Loha, Swarna Vasant Malati, Vaikrant Bhasma, Heerak Bhasma, Amritbhalatak Avaleha, Sanjivini Vati, Lavan Bhaskar Churna, Swarjika Kshara, Tablet Anacarcin, Kachanar Guggulu in form of Shamana Chikitsa. The local application in the form Kachanaradi Lepa was advised after local swedan with Arkpatra and Erandpantra.

The Kachanar Guggulu & Kachnar Kashya given to the patient as it is indicated in Apachi & Arbud in Ayurveda [2]. Research revealed that Kanchanar Guggulu exhibited a cytotoxic effect by inhibiting cell division (antimitotic) and reducing cell proliferation [3]. In vivo study against Dalton's ascitic lymphoma in Swiss albino mice, after 14 days of inoculation, Extract of Bauhinia variegate was found able to reverse the changes in the hematological parameters, protein and PCV consequent to tumor inoculation [4]. Amrit Bhalataka was given as it the best drug used in kaphaj Vyadhi & here Hodgkin's lymphoma & Apachi both are Kapha Pradhan Tridoshajanya as per Ayurveda and *Bhalatak* is the best drugs in this clinical condition [5,6]. Clinical case study showed marked improvement in symptoms and growth of Arbuda in neck region after the treatment with oral medicines which includes Bhalataka. The various research supports anti-cancer activities of Schedule E1 drugs including Bhalataka used in ayurvedic formulations [7]. The drug Bhallataka is used in the treatment of cancer after purification [8]. Clinical case

Table 1	
Similarity in clinical	feature of lymphoma and Apachi.

Sr.	Clinical Feature	Hodgkin's lymphoma	Apachi
1	Enlarged lymph nodes	In the neck, armpits or groin	Kantha-Manyasu Kaksha-Vankshana-Sandhisu
2	swelling	Painless	Alpa-Rujaste
3	fatigue	Persistent	-
4	Fever	Chill	-
5	Excessive sweats	Night sweats	-
6	Itchy Skin	itchy, red or purple lumps	Kandu

Table 2

Ayurvedic Treatment given to patient of Hodgkin's lymphoma.

Sr.	Medicine	Dose	Interval	Anupana
1	Arbudhher Kashaya + Kanchanar + Haridra	50 ml	Twice Daily	Kwath
2	Rodhra Rasa + Tapyadi Loha + Swarna Vasanta Malati + Vaikrant Bhasma + Heerak Bhasma	250 mg	Twice Daily	Before Milk with Amritabhalatak Avaleha
3	Amritabhalatak Avaleha	5 gm	Twice Daily	
4	Sanjivinivati	250 mg	Twice Daily	Luke Warm Water
5	Lavanbhasakar Churna + Swarjika Kshara	5 gm	Twice Daily	Butter Milk
6	Kachanar Guggulu	2 Tab	Twice Daily	Luke Warm Water
7	Tablet Anacarcin	2 Tab	Twice Daily	With Milk

Table 3

Clinical changes in patient of Hodgkin's lymphoma.

Sr.	Clinical Feature	Clinical Gradation Before Treatment	Clinical Gradation After Treatment
1	Lymph Node Enlargement	4	1
2	Pain at Site	4	1
3	Ear Discharge	3	0
4	Headache	3	1
5	Burning Chest	3	1
6	Total	17	4

Table 4

Radiological changes in patient of Hodgkin's lymphoma in 1st Tumour.

Sr.	Parameter	CECT Neck Before Treatment	CECT Neck After Treatment
1	AP - ANTEROPOSTERIOR	45 mm	40 mm
2	TR - TRANSVERSE	37 mm	0 mm
3	CC - CRANIOCAUDAL	40 mm	40 mm
4	Total	122 mm	80 mm

Note: mm = millimetres

Table 5

Radiological changes in 2nd tumour in Hodkings lymphoma.

Sr.	Parameter	CECT Neck Before Treatment	CECT Neck After Treatment
1	AP - ANTEROPOSTERIOR	34 mm	7 mm
2	TR - TRANSVERSE	30 mm	5 mm
3	CC - CRANIOCAUDAL	44 mm	8 mm
4	Total	108 mm	20 mm

Note: mm = millimetres.

report demonstrated successful management of high-grade NHL-DLBCL with exclusive Ayurvedic rasayana regimen including *Swarna* and *Heerak Bhasma* [9]. *Swarna Vasanta Malati* have *Swarna Bhasma* a chief ingredient and in clinical study, 17 patients out of 43 showed response who received *Swarna* preparation [10]. Previous research demonstrated the immunostimulatory and tumoricidal properties of nanodiamonds-based ayurvedic herbomineral preparations against highly metastatic and aggressive murine lymphoma [11]. Sajji Khar is a 2:1 mixture of sodium carbonate: sodium bicarbonate (NaHCO 3) and sodium bicarbonate has shown great potentials in cancer treatment due to its ability to neutralize the tumour acidic microenvironment and inhibition of tumour invasion and metastasis.

In a patient with Hodgkin's lymphoma, the nodular heterogeneous mass and growth in the neck reduced clinically with clinical gradation from 17 to 4 and radiologically with a reduction in first lymph node from 122 mm to 80 mm and in the second lymph node from 108 mm to 20 mm, while the size of third lymph node reduced from 32 mm to zero with Ayurveda treatment alone. Thus, a patient with Hodgkin's lymphoma was treated with Ayurveda successfully without conventional therapy. Follow up- Patient visited to the Ayurveda Cancer Consultation Unit on 10 / 02 / 2023 with complaint of APD (Acid Peptic Disease) & Anaemia.

7.1. Patient perspective

The patient was satisfied with her health improvement without any adverse effects.

7.2. Patient consent

Written permission for publication of this case study had been obtained from the patient.

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None.

Author contribution statement

Dr. Sharad Porte & Dr. Rakesh Bakolia contributed in conceptualization, methodology, drafting and reviewing the study.

Conflict of interest

None.

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References

- Atridev, Asthang Hridaya Uttarsthan Granthi-Arbud-Shlipad-Apachi-Nadi Vigyan Adhyay 29/23 e – 24. Chaukhambha Prakashan Varanasi, Reprint Edition; 2019. p. 758.
- [2] Vaidya Laxmipati Sastri, Yog- Ratnakar Gandamala-Apachi, Chaukhamba Prakashan Reprint Edition 2013, p. 150.
- [3] Tomar P, Dey YN, Sharma D, Wanjari MM, Gaidhani S, Jadhav A. Cytotoxic and antiproliferative activity of kanchnar guggulu, an Ayurvedic formulation. J Integr Med. 2018;16(6):411–7.
- [4] Rajkapoor B, Jayakar B, Murugesh N. Antitumour activity of Bauhinia variegata on Dalton's ascitic lymphoma. J Ethnopharmacol 2003;89(1):107–9. https:// doi.org/10.1016/s0378-8741(03)00264-2.
- [5] Gaur Banvarilal. Charak Samhita Chikitsasthan 1/2/19. 1st ed. Delhi: Rashtriya Ayurveda Publication; 2014. p. 47.
- [6] Sharma Anantaram. Sushrit Sutrasthan 45/122. Chaukhambha Surbharati Prakashan Varanasi, Edition Reprint; 2018. p. 370.
- [7] Vikram ENT, Ilavarasan R, Kamaraj R. Anti-cancer activities of Schedule E1 drugs used in ayurvedic formulations. J Ayurveda Integr Med 2022;13: 100545.
- [8] Ilanchezhian R, Roshy Joseph C, Rabinarayan Acharya. AN ayurvedic perspective of BHALLATAKA (Semecarpus anacardium linn.). Int J Res Altern Med 2014;1(2):43–58.
- [9] Bendale NY, Kadam A, Patil A, Kantilal Birari-Gawande P. Complete tumor regression with exclusive Ayurvedic rasayana regimen in high-grade diffuse

- large B-cell lymphoma: A case report. Clin Case Rep 2022. https://doi.org/ 10.1002/ccr3.5696.
 [10] Das S, Das MC, Paul R. Swarna Bhasma in cancer: A prospective clinical study. AYU 2012;33(3):365–7.
- [11] Paladhi A, Rej A, Sarkar D, Singh R, Bhattacharyya S, Sarkar PK, et al. Nanoscale diamond-based formulation as an immunomodulator and potential thera-peutic for lymphoma. Front Pharmacol 2022;13:852065.