

**CONCEPT OF *OJAS*, *BALA* AND IMMUNOMODULATION W.S.R. TO KASHYAP SAMHITA: A REVIEW****Renuka Nayak<sup>1</sup>, Lowkesh Chandravanshi<sup>2</sup>, Manoj Kumar Dash<sup>3</sup>, Lalit Mohan Bhatt<sup>4</sup>**

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**ABSTRACT**

Not so long ago, we faced the worst pandemics in history, so immunity and immunomodulation have been quite a topic of interest recently. Parallely, Ayurveda describes the concept of *Ojas*, *Bala* and *Vyadhikshyamta*, which can be maintained in its best state by dietary supplements and *Rasayana*. Acharya Kashyap has described *Ojas* as the yellowish-reddish-white matter present in the *Hridaya*, devoid of *Sleshma*. It flourishes by the food and herbs having *Snidgha*, *Laghu Guna*, *Madhura rasa*, and *Madhura vipaka*. In Kashyap Samhita, a limited description of *Ojas* is found compared to other ancient mainstream scriptures. Some special chapters devoted to *Ojas* and *Bala* (immunity in today's scenario) are *Lehana*, *Lasuna*, *Satapushpa* and *Satavarikalp*. *Lehana* in the form of *Swarnprashana* is one of the best immunomodulators available in Ayurveda, followed by regular dietary intake of Milk (having all qualities of *Ojas*). In this review article, efforts have been made to highlight the description of *Ojas*, *Bala*, *Vyadhikshyamta* and *Rasayan* in Kashyap Samhita.

**Key words:** Kashyap Samhita, *Ojas*, *Bala*, Immunomodulation, *Rasayana*,

## INTRODUCTION

The equilibrium of *Vata*, *Pitta* and *Kapha* (*tristhuna*) is the state of health and is called *Sukha*, i.e. absolute bliss.<sup>1</sup> This state of *Sukha* can be maintained by following a scheduled biorhythm and dietary habits that maintain the immune health of an individual. Ayurvedic views of immunity are very vast, including the concepts of *Ojas*, *Bala*, and *Vyadhikshyamta*. Immunomodulation brings the notion of *Rasayana*, and the importance of dietary composition as described in our old scriptures. *Rasayana* is a material which promotes general well-being by increasing cellular vitality and resistance. Acharya Kashyap has vividly described the concepts of *Ojas* (vital essence), *Bala* (available strength), and *Rasayana*. The idea of health and disease is also described in different views.

Immunity and immunomodulation have been quite a topic of interest in recent days. The underlying reasons are the exposure to environmental factors causing changes in the body, climate change, and bacterial and viral outbreaks leading to easy pandemic situations. Not so long ago, we faced the worst pandemic in history. In this scenario, preventing such biohazards is as essential as their treatment. To achieve it, building immunity in every person and the coming generation becomes a topic to be explored more. More efficient, available and palatable immunomodulatory drugs and food supplements should be searched and taken in daily practice. Kashyap Samhita, one of the fundamental texts of Pediatrics in ayurveda, also explains *Ojas* and substances enhancing *Ojas* or *Bala* in the human body.

## MATERIAL AND METHOD

For this review, literary materials have been searched, compiled, screened, and rearranged from Kashyap Samhita, where the concepts still need to be completed or added. So, wherever theoretical explanation is needed, some concepts have been taken from other texts and journals related to *Ojas*, *Rasayana*, immunology and *Vyadhikashyamta*.

## Review of Literature

Acharya Kashyap has described *Ojas* as the yellowish-reddish-white matter in the *Hridaya*, devoid of

*Sleshma*. When *Ojas* flourishes, the human body also flourishes. When *Ojas* get destroyed, the human body also perishes.<sup>2</sup> In different texts, *Ojas* is described closely to *Sleshma*<sup>3</sup>, but Acharya Kashyap has distinctly described *Ojas* as “*Sleshmanupashista*”, i.e. devoid of *Sleshmika* qualities. The quantity of *Ojas* all over the body is described as six *Anjalis*, similar to *Sleshma*'s.<sup>4</sup> Acharya Kashyap has described the food and herbs having *Snidgha*, *Laghu Guna*, and *Madhura in Rasa*, *Madhura Vipaka*, and *Hitakari* in nature should be taken to improve *Ojas* and *Bala*.<sup>5</sup> (Table No. 1) The *Bala*, *Varna* and *Ojas* are developed in the sixth month, indicating the connection between *Ojas* and *Bala*.<sup>6</sup> In Kashyap Samhita, a very confined description of *Bala* is available, but a vast description of drugs and regimens which improve the *Bala* is found. *Bala* is a body's general physical and immunological strength as described in other texts<sup>7</sup>. The Ayurvedic concept of *Ojas* (i.e., immunomodulation) highlights the *Rasayana* varieties, which are mentioned vividly. The *Rasayana* brings the drugs, foods or regimens rejuvenating the body into account.

## MEASURES TO IMPROVE IMMUNITY AND GENERAL STRENGTH :

### 1. LEHANA

#### 1.1 Swarna prashana

*Swarna Prashan* is an herbo-mineral preparation of incinerated gold ash [*Swarna Bhasma*], which is advised to be licked with *Ghrita* and *Madhu* in unequal quantities. It is administered orally on an empty stomach, preferably early morning and can be given from birth up to 16 years of age. It improves a child's intellect, digestion, strength, immunity, longevity, complexion and vitality.<sup>9</sup> Consuming it for one month can improve intellect, and regular consumption for six months can enhance one's memory power to an extraordinary level.<sup>8</sup>

#### 1.2 Samangadi leha

*Manjistha*, *Triphala*, *Brahmi*, *Bala*, *Atibala*, and *Chitraka Churna* in equal quantities to be administered with *Madhu* and *Ghrita* improve intellect, longevity, and strength.<sup>9</sup>

### 2. AHARA DRAVYA

Acharya Kashyap has described *Ahara* as “*Mahabhaisajya*”, i.e. outstanding medicine<sup>10</sup>. Many food preparations have been described as having *Rasayana* qualities, which improve general strength.

**2.1 Ghrita, Majja and Vasa** – The action of *Ghrita* on *Pitta* and *Vata dosha* is pacifying and does not allow the *Kapha dosha* to accumulate. It improves general strength, digestive fire and intellect. Additionally, *Majja* and *Vasa* are the forms of *Sneha*. It pacifies *Vata dosha* and improves the *Bala* and *Ayu* of a person.<sup>11</sup>

Early descriptions of *Ghritas* as nutritive agents (*Rasayanas*) are mentioned for daily use to increase longevity.<sup>12</sup> *Ghrita* is described as *Yogavahi Rasayana*, i.e. an agent capable of acquiring and imparting the entire quality of “drug” added to it. The lipid-based formulations have better bioavailability without being affected by food. The butter, clarified by heating, enriches *Ghrita* with DHA (decohexanoic acid), a long chain PUFA (Polyunsaturated Fatty Acid). It contains omega-7 and omega-9 like oleic acid, vaccenic acid Conjugated Linoleic Acid (CLA) isomer along with traces of fat-soluble vitamins K2, A, D, and E, contributes to anti-viral, anti-carcinogenic, anti-atherogenic, anti-diabetic, antimutagenic, anti-hypertensive, immunomodulatory properties.<sup>13</sup>

**2.2 Dugdha** – *Dugdha*, in general, is *Snigdha* and *Guru* in nature, *Madhura Kashaya* in *Rasa* and *Sita* in *Virya*. It provides instantaneous strength to the body, improves *Bala*, *Ayu*, and *Arogya* and is described as the best *Rasayana*.<sup>14</sup> In other scriptures, the qualities of *Dugdha* are described as similar to those of *Ojas*, and hence, it directly improves the status of *Ojas* in the body.

Human milk produced during the early lactation period delivers approximately 10<sup>8</sup> maternal leukocytes to infants per day. About 80% of leukocytes in colostrum are macrophages that migrate from the bloodstream into the milk through the mammary epithelium. These mononuclear leukocytes can act as essential and ideal breast milk macrophages through phagocytosis of human milk components and their differentiation into dendritic cells that stimulate T-cell ac-

tivity and can, therefore, provide robust protection against pathogens.<sup>15</sup>

The proteins of cow milk are essentially divided into whey components and casein. These factors have high bioactive molecules like transforming growth factors  $\alpha$  and  $\beta$ , insulin-like growth factors, fibroblast growth factors, and epidermal growth factors. Whey protein concentration (WPC) activates adaptive immunity (IgG) against Antigen by modulating helper T cells.<sup>16</sup>

**2.3 Takra** – *Takra* is the processed buttermilk. *Amla* in *Rasa* has *Laghu*, *Vishad Guna*, and *Ushna Virya*. It improves digestive fire. It is nutritional, and it improves general strength.<sup>17</sup>

**2.4 Manda**- Dry roasted rice cooked thrice with *Deepaniya Dravya*, *Mudga*, *Yava* and *Laja* provides instantaneous strength to the body.<sup>18</sup>

**2.5 Mansa rasa**- Meat processed with *Ghrita* and *Dugdha* improves *Bala* and is *Rasayana*.<sup>19</sup>

### 3. MEDICINAL HERBS

**3.1 Lasuna**- *Lasuna* (*Allium sativum* Linn) i.e Garlic, having *Lavana*, *Tikta*, *Kasaya rasa*, *Madhura* in *Vipaka* and *Snigdha* in *Guna*. It is edible, increases memory, intellect, and general strength, and is suitable for eight. It improves longevity of life enhances digestion. It is considered as *Rasayana*.<sup>20</sup> Garlic is one of the widely used medicinal herbs and spices with organosulfur compounds having a wide range of biological and pharmacological properties. It contains S-allyl-L-cysteine sulfoxide and  $\gamma$ -glutamyl cysteine derivatives. Studies show that garlic-derived compounds can inhibit transcription factor NF- $\kappa$ B, a master regulator that inhibits transcription of several cytokine genes involved in proinflammatory responses.<sup>21</sup>

**3.2 Satapushpa**- *Satapushpa* (*Anethum sowa* Kurz) i.e Dill seeds is *Madhura* in *Rasa*, *Ushna* in *Virya*. *Satapushpa* improves general strength, complexion, and digestive fire, regulates menstruation, purifies *Sukra dhatu* and improves reproductive health.<sup>22</sup>

**3.3 Satavari**- *Satavari* (*Asparagus racemosus*) is *Kasaya* and *Madhura* in *Rasa*, *Snigdha* in *guna*, *Sita* in *Virya*. A *Rasayana* pacifies *Vata*, *Pitta* and *Vivandha*(constipation). It improves complexion, *Ojas*, and

*Bala*.<sup>22</sup> *Shatavari* consists of several molecules like steroidal saponins, alkaloids, flavonoids, dihydropheanthrene derivatives, and other volatile constituents. It also contains an oligospirostanoside oil, which regulates antibody synthesis and improves cell-mediated

immune response. It also contains satavarin VI (5) and satavarin VII (6), which is reported to have immunostimulant property<sup>23</sup>.

**Table No. 1 – Ojas-vardhak Dravyas mentioned in Kashyap Samhita and their properties.**

Dravyas	Madhura	Snigdha	Sita	Laghu	Hitakari
Ghrita	+	+	+	-	-
Vasa	-	+	-	-	-
Majja	-	+	-	-	-
Dugdha	+	+	+	-	+
Aja dugdha	+	-	+	+	-
Ustra dugdha	+	-	-	-	-
Shatavari	+	+	+	-	-
Shatapushpa	-	-	-	+	-
Lasuna	+	+	-	-	-

#### 4. PANCHKARMA THERAPY

**4.1 Niruha basti-** *Niruha basti* is a specialised therapy included in *Panchakarma*. It is prepared with various medicinal herbs and administered as an enema. These medicinal herbs can pull the vitiated doshas from the body's channels. *Niruha basti*, given to children at the ideal time, has a vital effect on their health, as it acts as *Amrit*. It improves complexion, general strength and longevity of life. It improves *Sukra dhatu* and improves reproductive health<sup>24</sup>. It is described as '*Ksipramurjaskara*' i.e which improves *Ojas* instantaneously.<sup>25</sup>

**4.2 Anuvasan basti-** *Anuvasan basti* is another essential procedure in *Panchakarma*, where medicated oils are administered as an enema. Properly planned *Anuvasan basti* improves digestive fire, stabilizes life energy, is nutritional, improves complexion and memory power, and increases general strength.<sup>26</sup>

#### DISCUSSION

The core understanding and knowledge of the Ayurveda concept described in *Kashyap Samhita* remains intact and needs exploration. The screening of *Kashyap Samhita* shows no vast and direct description of *Vyadhiksyantva* and *Rasayana*. Compared to other ancient mainstream scriptures, a limited description of *Ojas* is found. Some special chapters devoted to *Ojas* and *Bala* (immunity in today's scenar-

io) are *Lehana*, *Lasuna*, *Satapushpa* and *Satavarikalp*. *Lehana* in the form of *Swarnprashana* is one of the best immunomodulators available in Ayurveda, followed by regular dietary intake of Milk (having all qualities of *Ojas*). *Lasuna*, *Satapushpa*, and *Satavari* are critical medicinal plants and major household spices of Indian dietary habits, indicating their therapeutic importance as an *Ojas vardhak* (Immunomodulator) and *Balya Dravya*. Giving particular importance to *Ahara* (diet), various *Rasayana*, *Balya Pustikara ahara* and *Dravyas* are mentioned sporadically throughout the *Samhita*. The missing portions of *Samhita* could have explained it better, but correlating this scripture with other texts gives us a clear understanding of these concepts.

#### CONCLUSION

Critical analysis and review of *Kashyap Samhita* imply a need for detailed exploration of various concepts that are missed out in this *Samhita*. Still, the description of *Ojas and Rasayana* is abundant concerning immunity and immunomodulation.

*Kashyap Samhita* has given particular importance to immunology and methods to strengthen the immune system with a significant focus on newborns to 16 years old and even adults. The concepts still need to be included in this text, but the methods and *Dravyas* are described to improve *Ojas* and *Bala*. All this is available in the context of paediatrics shows the ex-

cellence of Acharya Kashyapa in Kaumarabhritya, making this scripture one of the primary texts of Kaumarabhritya.

## REFERENCES

1. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Sutra Sthana, Rogadhyay, sloka no 6, ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 58
2. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Sutra Sthana, Rogadhyay sloka no 15 ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 60.
3. Agniveshatantra, Caraka Samhita, Vidyotini hindi commentary, Pt. Kashinath Pandey, Dr. Gorakhnath Chaturvedi, Sutra sthan, kiyantshirashiyadhyay, sloka no 117 ver. Reprint edition 2014, Varanasi, Chaukhambha Bharati Academy, page no. 366.
4. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Sharir Sthana, Sharirvichaya Shariradhyay, ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no.115.
5. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Sutra Sthana, Rogadhyay sloka no 16 ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 61.
6. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Sharir Sthana, Asamanagotriyadhyaya ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 103.
7. Agniveshatantra, Caraka Samhita, Vidyotini hindi commentary, Pt. Kashinath Pandey, Dr. Gorakhnath Chaturvedi, Sutra sthan, Trisheshaniyadhyaya, sloka no 36 ver. Reprint edition 2014, Varanasi, Chaukhambha Bharati Academy, page no. 228.
8. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Sutra Sthana, Lehadhyaya ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 6.
9. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Sutra Sthana, Lehadhyaya ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no.7.
10. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Khil Sthana, Yushanirdeshiyadhyay Sloka no six ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrit Sansthan, page no.378
11. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Sutra Sthana, Snehadhyaya Sloka no 6 and 8 ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no.24.
12. Agniveshatantra, Caraka Samhita, Vidyotini hindi commentary, Pt. Kashinath Pandey, Dr. Gorakhnath Chaturvedi, Sutra sthan, Yajjapurushiyadhyay, ver. Reprint edition 2014, Varanasi, Chaukhambha Bharati Academy, page no. 468.
13. Tripathi G, Aeri V. Science Behind Ghrita - The Lipid-Based Ayurvedic Formulations. Clin Case Rep Int. 2022; 6: 1375.
14. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Kalpa Sthana, Bhojana Kalpa, sloka no 86-88 and 94 ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 315-316
15. Kim YJ. Immunomodulatory Effects of Human Colostrum and Milk. Pediatr Gastroenterol Hepatol Nutr. 2021 Jul;24(4):337-345. doi: 10.5223/pghn.2021.24.4.337. Epub 2021 Jul 5. PMID: 34316468; PMCID: PMC8279828.
16. Ha DJ, Kim J, Kim S, Go GW, Whang KY. Dietary Whey Protein Supplementation Increases Immunoglobulin G Production by Affecting Helper T Cell Populations after Antigen Exposure. Foods. 2021 Jan 19;10(1):194. Doi: 10.3390/foods10010194. PMID: 33477967; PMCID: PMC7835905
17. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Kalpa Sthana, Bhojana Kalpa, sloka no 62 ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 312.
18. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Kalpa Sthana, Bhojana Kalpa, sloka no 73-74ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 313.
19. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Khil Sthana, Mamsagunavisheshadhyaya sloka no 18 ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 553.
20. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Kalpa Sthana, Lasuna Kalpa, sloka no 11, 15-18 ver. Reprint edition

- 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 262-263
21. Arreola R, Quintero-Fabián S, López-Roa RI, Flores-Gutiérrez EO, Reyes-Grajeda JP, Carrera-Quintanar L, Ortuño-Sahagún D. Immunomodulation and anti-inflammatory effects of garlic compounds. *J Immunol Res.* 2015; 2015:401630. doi: 10.1155/2015/401630. Epub 2015 Apr 19. PMID: 25961060; PMCID: PMC4417560.
  22. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Kalpa Sthana, Satapushpasatavari Kalpa, sloka no 5-8 ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 280
  23. Singla R and Jaitak V: Shatavari (*Asparagus racemosus* Wild): A review on its cultivation, morphology, phytochemistry and pharmacological importance. *Int J Pharm Sci Res* 2014; 5(3): 742-57. doi: 15.13040/IJPSR.0975-8232.5(3).742-57.
  24. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Siddhi Sthana, Rajaputriya siddhi, ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrit Sansthan, page no.223-224
  25. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Khil Sthana, Basti visheshaniyadhyaya, sloka no 74 ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no. 430.
  26. Vridhhajeevaka, Kashyapa Samhita, Pandit Hemaraja Sharma, Satyapala Bhishgacharya, Siddhi Sthana, Trilakshyana siddhi, ver. Reprint edition 2022, Varanasi, Chaukhambha Sanskrita Sansthan, page no.227.

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