

## Bird's Eye Review on Vajra: An Exquisite Carbon

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### Abstract

Minerals, metals and gemstones have an affluent history of being employed for their therapeutic qualities once they undergo specific processing procedures. Among these gemstones, Vajra (Diamond) stands out as it is recognized as a Rasayana due to its inherent characteristics. It has been categorized within the realm of Ratna Varga. From a chemical stance, Vajra (Diamond) is renowned as the most resilient mineral found on Earth with carbon being its predominant constituent. This article delves into an exhaustive analysis of Vajra as per classical literature. Multiple classical texts of Rasa Shastra are meticulously examined to provide an extensive account of Vajra, encompassing its Prapti sthaan (Occurrence), Paryaya (Synonyms), Vargikaran (Classification), Karma (Pharmacological properties), Ashuddha Vajra Dosha, its prativisha (antidote), Shodhana (Purification), Marana (Incineration), Matra (Therapeutic dose), Chikitsiya Prayog (Therapeutic indications) and Druti preparation (Liquefaction). While Vajra is commonly used for ornamental purposes, it also finds a distinct role in therapeutic applications after undergoing purification and incineration processes, both internally and externally.

**Keywords:** Vajra, Ratna, Carbon, Rasashastra, Gems.

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## INTRODUCTION

In terms of general chemical reaction, precious stones or Gems and minerals are made up of the same chemical elements, arranged as per specific principles. Diamond is entirely composed of the common and widely abundant element carbon. However, carbon in the form of a diamond possesses unique characteristics that distinguish it from graphite and coal [1]. For countless ages, Indian Vaidyas have harnessed the therapeutic potential of various valuable stones to create remedies known as "Ratnakalpas." The literature of Indian medicine has over time, meticulously detailed the attributes and qualities of numerous gems employed in the practice of "Ayurveda." From the ancient "Charaka Samhita" dating back to the first century B.C. to the more contemporary "Rasajalanidhi" of the 20<sup>th</sup> century A.D., numerous texts have delved into the subject of gemstone remedies [2]. Precious stones utilized for medicinal purposes in the field of Rasashastra are referred to as

Ratna. These exceptional stones possess a distinct allure and significance when compared to other metals and minerals used in this domain [3]. Gemstones are classified into various types, species, groups and their characteristics are assessed based on dispersion, hardness, specific gravity, refractive index, luster, fracture and cleavage [4].

Gemstones are classified into different varieties, species, and groups. They are also characterized in terms of dispersion, hardness, specific gravity, refractive index, luster, fracture, and cleavage.

The precious stones that attract the people who wish to have more affluence and wealth are called "Ratna" [5]. Vajra (diamond) for instance is extensively discussed within the classification of Ratna Varga (gem classification) in classical Ayurvedic texts [3]. In Ayurveda, drugs are categorized depending upon the

origin like Jangama dravyas (Drugs of animal origin), Audbhida dravyas (Drugs of plant origin) and Parthiva dravyas (Drugs of mineral origin) [6]. Ratna Varga is also categorized within this framework; placing Vajra, Maanikya, Tarkshya, Pushparaga, Neelam, Gomeda, Vaidurya under Khanija; Mukta & Vidruma under Praanij; Trinkantmani & Sangemusha under Audbhida Dravya [7].

In accordance with Rasaratna Samuchchaya [8], Rasatarangini [3] and Rasaprakasha Sudhakar [9]; there are nine varieties of Ratnas (precious gemstones) known as Nava Ratnas, each associated with one of the nine celestial bodies (Nava Grahas). These include Manikya (Ruby), Mukta (Pearl), Vidruma (Coral), Tarkshya (Emerald), Pushpa (Topaz), Bhidur (Sapphire), Neelam (Sapphire), Gomed (Zircon), and Vaidurya (Cat's Eye). These gemstones are linked to the celestial bodies Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn, Rahu and Ketu respectively. Ruby, Emerald, Topaz, Diamond and Sapphire are considered superior to the others. Large, well-rounded pearls are highly regarded [5]. The text "Rasaratnasamuchchaya" authored by Vagbhatacharya (9th Century A.D.) depicted a prominent place among these texts. This extensive work provides a comprehensive account of the minerals used in Indian remedies, categorizing them as Maharasa, Uparasa, Sadharana rasa and Gems. Vagbhatacharya dedicates one chapter of the text, Chapter No. 4, to elucidating gems and their medicinal attributes in the context of Indian medicine [8].

Vajra (diamond) is extensively elaborated under classification of Ratna Varga (gems classification) in classical texts of Ayurveda [1]. In Rasa classics, it is mentioned with various synonyms such as Kulisha, Hiraka, Abhedya, Chandra, and Bhidhura [2].

Vajra (diamond) is significantly discussed within the classification of Ratna Varga (gem classification) in traditional Ayurvedic texts [3]. In Rasa classics, it is referred by various synonyms i.e., Kulisha, Hiraka, Abhedya, Chandra and Bhidhura [7]. The Rasaadhyaya literature provides a succinct description of the qualities of a natural diamond (Prakrutika Vajra) [10]. The finest variety of diamond is one that is smooth to the touch (Snigdha), radiates a luster reminiscent of electricity (Vidhyutabham), appears clean (Swachha), is remarkably hard and unbreakable (Alekhya), exhibits astonishing sharpness (Tikshna) and boasts six angles and eight surfaces (Shatakona, Ashtashtra). This superior variety is selected for pharmaceutical purposes [3]. Classically it is used to treat Vata and Pitta Dosha disorders, such as emaciation (Shosha), depletion (Kshaya), giddiness (Bhrama), fistula in ano (Bhagandara), frequent and profuse micturition (Meha), aggravation of fat (Meda), pallor (Pandu), clinical features of Ascites (Udara), swelling (Swayathu) and infertility (Napusankata) [11].

### Origin of Vajra in Mythology

As per Rasarnav, Ayurveda Prakash, Brihatrasarajsundar, and Rasapaddhati, during the Samudra manthan (Sea Churning) on the Mandarachal mountain, a fascinating transformation occurred. The Devas (celestial beings) were the first to acquire the Amrit (Nectar) through this incidence. As they consumed this elixir, a few drops accidentally spilled to the ground and under the intense heat of the Sun, these drops miraculously transformed into Vajra (Diamond) [12].

Another theory holds that Vajra is comprised of the bones of the revered sage Maharshi Dadhichi. In the Kritiyuga era, a Rakshasa named Ditiputra Balnamaka possessed invincibility, making it impervious to defeat by either Devas or Rishis. On the behalf of the Devas, Maharshi Dadhichi generously donated his body and Lord Indra performed a profound chhedana karma (sacrificial act). Remarkably different varieties of Vajra were created from various parts of Ditiputra Balnamaka's body, the Mastaka (Forehead) and Mukha (Face) yielded the Brahmana type, Bahu (Arm) and Vakshasthala (Upper trunk) gave rise to the Kshatriya type, Nabhi (Umbilicus) and Kati (Waist) produced the Vaishya type while the Legs and Knees resulted in the Kshudra type of Vajra [13-15]. Besides it is worth noting that Vajra was said to manifest in different geographical locations during different cosmic eras: Koshal in Kritayuga, Vang and Maalva in Tretayuga, Saurashtra and Manipundraka (Manipur) in Dwapar and Sopar and Vajraakar (Vairagar) in Kaliyuga [13].

### Different References of Vajra in Samhitas

**Charaka Samhita [6]:** 'Mani' word has been used in various places in Charaka Samhita but specifically, Vajra is used for Dharana in Sarpadansha Nivarana (Cha. Chi.23/252). It is also depicted in the treatment of Kustha (Cha. Chi 7/72). Here Vajra Shilajit is mentioned, obtained from mines of Diamond.

**Sushruta Samhita [16]:** Acharya Sushruta has also illustrated Ratna for external use in the form of Lekhyanjana in Ophthalmic disorders (Su. U. 12/24). The renowned acharya has mentioned the name of Mani like Mukta, Vidruma, Vajra, Vaidurya, Sphatika etc. as well as their properties of Netrya, Sheetal, Lekhana, Vishanashak, Pious, Wearable, Paapnashak varga (Su. Su. 46/ 331-332).

**Ashtang Hridayam [17]:** In the general procedure of *Graha Avesha* i.e., Homa Bali, Gems (Ratna) and garlands are being advised to wear according to specific evil. (A.H.U 5/23). Heeraka along with Neelam, Pukharaj, Roupya, Sphatika, Svarna, Krishna Anjana, Tamra, Shankha and Gairika are used as Churnanjana under Varti/Anjana Kalpana for Eye disorders.

**Sharangadhara Samhita [18]:** Shodhana & Marana processes of Vajra are indicated as Vatanashana Rasa in

Vatavyadhi. It is also recommended as a Vajikarana drug in Madana Kamdev Rasa, Kandarpa Sundar Rasa etc.

**Bhava Prakasha [19]:** The author is described Vajra under the broad heading of ratnas. He has given Shodhana, Marana, adverse effect of unpurified Vajra & properties of Vajra and also indicated that this Ratna is of Shukra Graha.

**Bhaishajya Ratnavali [20]:** In this text there is a complete description about Vajra with its Shodhana and Marana, properties, therapeutic use & doses etc. There are some references of formulation are also elucidated here as Vatanashana Rasa, Vatakantaka Rasa, Trailokya Chintamani Rasa etc.

**Table 1: Mineralogical Classification [21]**

Chemical Composition	C (Elemental Carbon)
Colour	Most often colourless to yellow or brown. Rarely Pink, Orange, Green, Blue, Gray or Red
Lustre	Adamantine – the highest level of lustre for a non-metallic mineral
Crystal System	Cubic
Crystal Habit	Octahedral, Cubo-octahedral. Spherical or Cubic
Cleavage	Octahedral; Perfect & Easy
Specific Gravity	3.516 – 3.625
Diaphaneity	Transparent, Translucent, Opaque
Hardness (Moh’s Scale)	10
Fracture	Conchoidal
Streak	None or Colourless
Refractive Index	2.417
Dispersion	0.044
Melting Point	3550°C
Boiling Point	4830°C

**Synonyms in various Classical texts:** Heeraka, Vajra, Ashir, Shatkon, Dridgarbhak, Chandra, Manivar [19], Heeraka, Heer, Abhedya, Bhidur, Kulisha, Vajraka, Vajra, Bhargavpriya [3].

**English** – Diamond

**Latin** – Pure carbon Adams [22]

**Table 2: Classification of Vajra in different Classics**

Type	Variety	Classics
4 types (Accd to Varna)	Shweta, Rakta, Peet, Krishna	Rasendrachudamani [23] Rasendrachintamani [24] Rasaprakash Sudhakar [25] Rasarnav [12], Ayu Pra [13], SN [22], BN [19], Rasratnakar Riddhi khand [26], RRS [8], Brihatrasrajsundar [14]
3 types	Stree, Purush, Napunsak	Rasendrachintamani [24] Rasaprakash Sudhakar [25] Rasarnav [12], Rasendrachudamani [23] Rasratnakar Riddhi khand [26], RRS [8], Raspaddhati [15], SN [22], BN [19] Rasendra sambhav [27]
4 types (Accd to jaati)	Brahman, Kshatriya, Vaishya, Kshudra	Rasendrachintamani [24] Rasaprakash Sudhakar [25] Rasarnav [12], Rasendrachudamani [23] Rasratnakar Riddhi khand [26] RRS [8], Raspaddhati [15], Ayu Pr [13], SN [22], BN [19]
5 types	Shweta, Rakta, Peet, Krishna Harita (Dev roop)	Rasendra sambhav [27]

**Table 3: Classification and properties of Vajra in different Classics [24]**

Jati	Brahmana	Kshatriya	Vaishya	Kshudra
Varna	Shwet	Rakta	Peet	Krishn
For Male	Purusha	Purusha	Purusha	Purusha
For Female	Stree	Stree	Stree	Stree
For Napunsak	Napunsak	Napunsak	Napunsak	Napunsak
Uses	Rasayana, Sarvsiddhidayak	Jaravyadhi Mrityu nashan	Dhandayak Deha dridkar	Vyadhinashak Vayasthapak

**Physical Properties of Each Type of Vajra [12]**

**Nara Vajra** – It is round in shape with eight edges, eight surfaces, six angles, radiant and exhibits many colours just like Indra Dhanusa (Rainbow) in the sky and is Varitara (Light in wt.). As per 'Rasarnava' it is round and without Rekha and Bindu doshas. Besides, it is claimed Sarvadoshapaha, Vedhaka and Rasa bandhanakar.

**Nari Vajra** - It possess all the aforesaid characteristics but it's shape is flat and oval. It may have Rekha and Bindu doshas, Karkasha (Rough) to touch and Dehasidhikara.

**Napunsaka Vajra** - It is round and does not have edges and angles, heavy in weight. It is claimed to be Kramana and inferior to all ratnas.

**For Superior Variety** - The ideal Vajra (Diamond) should exhibit specific characteristics: it should have

eight edges, eight surfaces, six angles, a captivating and brilliant appearance, be colorless yet transparent and have a round and luminous shape. It should be flawless, clear and possess a radiant white appearance, resembling the brilliance of a star. When light interacts with its inner surface it should create a dazzling display of vibrant colours. Furthermore, it should bear the unique property of being able to cut all the other substances while remaining impervious to cutting itself due to its exceptional hardness.

**For Inferior Quality** – The undesirable Gemstones are not perfectly round, lack a radiant shine, appear in shades of blue or ashy gray, exhibit damage such as being broken from one side and have surface imperfections like Rekha and Kakapada dosha. These characteristics are of inferior quality in gemstones.

**Table 4: Rasa-panchak of Vajra (Ayurvedic Pharmacological properties) [12]**

Rasa	Guna	Dosha Prabhava	Karma	Vyadhi Prabhava
Shadrasa	Snigdha	Tridosha shaman	Ayuprada, Param Hridya, Yogavahi, Vrishyatama Vayastambhakara Kaantijanan, Saukhya janan, Rasayana, Rasamaraka Netrya, Medhya Rasabandhakara	Sakalaroga, Vali-Palitya Rajyakshma, Prameha Medoroga, Pandu Shotha, Udara Roga Mrityuhara

Vajra Shodhana (Method of Purification): Within Rasa Shastra, Shodhana is a process aimed at eliminating physical impurities and Vishadi Doshas from a substance, transforming it into a form suitable for therapeutic purposes. Many ancient texts have extensively detailed the adverse effects associated with Ashuddha Vajra, which include conditions such as

Parshvapeeda (flank pain), Pandu roga (anemia), Hrilasa (nausea), Daha (burning sensation), Guruta (heaviness), Rakta vikrati (blood disorders), Kushtha (skin diseases), Bhrama (dizziness), Murchha (fainting), and more. To prevent these complications, various methods for Shodhana (purification) of Vajra have been devised by accomplished Acharyas (experts).

**Table 5: Different summarized methods of Vajra Shodhana**

Principle Followed	Drug used	Duration / Process repetition	Reference
Nimajjan	Ashwamutra	7 times	Rasendrachintamani [24]
Swedan	Kulatha/Kodrava Kwatha	3 hrs	Rasaprakash Sudhakar [25] RJN [28]
Mardana	Shyama nishotha, Shami, Mustaka, Punarnava, Kodo, Aakhukarni, Agastya, Kulatha, Amlavetas, Meshshringi, Surankand Swarasa	3 days	Rasarnav [12]
Swedan (Dolayantra)	Vajra kept in Vyaghrikand in mixture of Kodo + Kulatha Kwatha	7 days	RasendraSaarsangraha [29], Ayu Prak [13], RJN [28]
Swedan (Dolayantra)	Vajra kept in Vyaghrikand → Kodo + Kulatha Kwatha for 1 day → sprayed by snuhi ksheer/Ashwamutra	1 day	RasendraSaarsangraha [29], Ayu Prak [13]
Putpaka (Gajaputa)	Vajra kept in vyaghrikand smeared with Maahish Vishtha, →Tushagni for 24 hrs, immersed in ashwa mutra	7 times	Rasratnakar [26], Ayu Prak [13], RJN [28], BRRS [14]
Swedan (Dolayantra)	Vajra kept in vyaghrikand, immersed in a mix of Kulathi + Kodo kwath + Ashwamutra + Kumari swaras.	Ahoratra 24 hrs	Rasratnakar [26]

Principle Followed	Drug used	Duration / Process repetition	Reference
Swedan (Dolayantra)	Decoction of Equal parts of Aakhukarni + Meghnad + Priyangu + Amlavetas + Nirgundi + Kulath + Kodo + Shami + Agastya & Ashwamutra	3 days	Rasratnakar [26]
Swedana (dolayantra)	Vajra placed in Jambiri Nimbu → decoction of Meghanada, Shami, Shyama, Shringi, Madana, Kodrava, Kulatha, Vetasa, Agastya, Nirgundi & Jala	3 days	RJN [28],
Putpaka	Kept inside vyaghri tuber, coated on all sides with mud, heated by put → immersed into horse's urine/ snuhi ksheer	24 hrs	RJN [28], BRRS [14]
Swedana	In Jayanti patra swarasa	1 hour	RJN [28],
Swedan (Dolayantra)	Kept in vyaghri tuber → Kulatha and Kodrava Kwatha	3 days	Rasapradeep [30]
Swedan (Dolayantra)	Kulatha or Kodo Kwatha	1 prahar	RRS [8], BRRS [14] Rasendrasambhav [27]
Swedan (Dolayantra)	Kodo Kwatha	7 days	RT [3]
Swedan (Dolayantra)	Kulatha Kwatha	3 days	RT [3]
Nirvapa	Heated & quenched in Snuhi dugdha	100 times	Rasendrasambhav [27], RT [3], Rasamrit [31]
Nirvapa	Heated on a high flame & quenched in Parada	100 times	RT [3]
Swedan (Dolayantra)	Vajra in Vyaghrikand → Kodo + Kulatha Kwatha	3 days	Ayu Prak [13] Sharangdhar [18]
Swedan (Dolayantra)	Vajra kept in Vyaghrikand → in Kodo kwath	7 days	BRRS [14]
Nirvapa (Quenching)	Vajra is heated and quenched in Khar mutra	21 times	Sharangdhar [18]

**Table 6: Different summarized textual methods of Vajra Marana (Process of Incineration):**

Principle Followed	Drug used	Duration/ Process repetition	Ref
Gajaputa	Vajra kept in kalka of 3 yrs old Nagvalli & Karpas mool	7 times	Rasendrachintamani, Ayu Prak [13], BRRS [14]
Nirvapa	Hingu + Saindhav + Kulatha Kwatha	21 times	Rasendrachintamani Ayu Prak [13], Sharangdhar Rasapradeep, BRRS [14]
Nimajjana	Manduk mutra	21 times	Rasendrachintamani, Ayu Prak [13], BRRS [14], Sharangdhar [18], Rasapradeep [30],
Varahputa Nimajjana	Matkun rakta, kulatha kwatha, shudha manhashila	100 times	Rasaprakash Sudhakar [9]
Nimajjana	In kasmard swaras for 7 days, Then, heated and dipped in Gomutra 7 times	7 times	Rasaprakash Sudhakar [9]
Gajaputa	Powder of Vajra is kept in Neeljwala tuber	20 times	Rasaprakash Sudhakar [9]
Gajaputa	Vajra kept in equal parts of Rasa of Mendak shringi, Bhujangasthi, Kurm pristha, Amlavetas, shashak danta, mixed with Snuhi dugdha	-	Ayu Prak [13], BRRS [14]
Putpaka	Vajra in Rasa of Mendak shringi, Bhujangasthi, Kurm pristha, Shilajit, Snuhi, Shallaki, Dugdha, Kantloha, Vajrabhra, and Vaikranta. → Sechana by Kulatha, Kodo kwath with ashwa mutra	-	Rasarnav [12]

Principle Followed	Drug used	Duration/ Process repetition	Ref
Putpaka	Musha Lapan with Makshik, Meshashringi, Manahshila, Gandhak, Tankana, Vaikranta, Hartala with Snuhi dugdha.	-	Rasarnav [12]
Putpaka	Musha Lapan with mix of Gandhak, Manahshila, Bhramak (Shrigaal) mukha, Shashak daant & Amlvetasa.	-	Rasarnav [12]
Putpaka	Musha Lapan by Hartala, Gandhak, Kantloha, Tankana, Swarnmakshika, Karpura, Tankana, Imli beeja, Meshashringi & Streeraja	-	Rasarnav [12]
Putpaka	Sharpunka panchang + Kuberakshi + Stree raja + Karanja beeja + Tandulajala + Trikarsha + Karpasa mool / Raktmadar + Stree dugdh / Surankand + Snuhi ksbeer	-	Rasarnav [12]
Putpaka	Bhawana of Vajra with Indravaruni sheer in Shukti for 1 day → Lepana by kalka of Indravaruni + Hartala + Meshashringi + Vajravalli	-	Rasarnav [12]
Dhaman	Vajra in Pishti of Kantloha → grinded with gandhak taila	-	Rasarnav [12]
Dhaman Nimajjana	Vajra heated → quenched in mix of Kasisa, Saurashtri, Hartala, Apamarg kshara with Kulath kwatha	-	Rasarnav [12]
Putpaka	Lepana of Musha with Kalka of Guduchi, Surana, Tamala, Swarnbeeja, Vanshlochana	-	Rasarnav [12]
Putpaka	Musha Lepana with Kalka of Petari, Hanspadi, Vajravalli, Suran & Pippali ankur with Stree dugdha	7	Rasarnav [12]
Putpaka	Kalka of Shwet bakuchi rasa + gandhak + Tarya makshika	-	Rasarnav [12]
Putpaka	Kalka of Ashwatha, Badar, Bhindi, Madhu, Karkatasthi with snuhi ksbeer	-	Rasarnav [12]
Putpaka	Kalka of Kaner + Arka dugdha with Hingula & Udumbar saar	For kshatriya vajra	Rasarnav [12]
Putpaka	Kalka of Bala, Atibala, Gandhaka, Karkatasthi with Indravaruni ksbeer	Vaishya Vajra	Rasarnav [12]
Putpaka	Surana + Manahshila + Rasona + Nyagrodha	Shudra vajra	Rasarnav [12]
Putpaka	Amla panchang + Shwet Indravaruni Kalka	7	Rasarnav [12]
Putpaka	Vajra in bolus of kantloha. → lepa of Karpasa+ Nimba patra + badar patra	2 pahar	Rasarnav [12]
Gajaputa	Shudha vajra in bolus of 3 yrs old Karpas mool + Nagvalli	7	Rasendra Sara sangraha [29]
Nimajjana/ Nirvapa	Shudh vajra after red hot dipped in Mandukmutra in Kansya container.	21 times	Rasendra Sara sangraha [29]
Nimajjana/ Nirvapa	Heated, dipped in Ashwamutra 21 times → coated with Lepa of Hartala, reheated & dipped in mutra 21 times	42 times	Rasendra Sara sangraha [29]
Nirvapa	Vajra is coated with Matkun Rakta and heated red hot	21 times	Rasratnakar [26]
Nirvapa	Shudh vajra is kept inside a bolus of Hartala & Matkun → quenching in ashwamutra	7 times	Rasratnakar [26]
Gajaputa	A bolus of Karpas mool + Nagvalli is made.	7 times	Rasratnakar [26]
Nirvapa	Vajra kept in a bolus of Bhasma of Hartala, Kasis, Saurashtri & Apamarga + kulatha kwatha.	21 times	Rasratnakar [26]
Nirvapa	Vajra kept in a bolus of Vaikranta bhasma + amlvetasa & quenched in ashwa mutra.	21 times	Rasratnakar [26]

Principle Followed	Drug used	Duration/ Process repetition	Ref
Nirvapa	Vajra kept in a bolus of Kantpashana + Indravaruni dugdha & quenched in ashwa mutra + gandhak taila.	-	Rasratnakar [26]
Nirvapa	Vajra kept in a bolus of Bhunaga + Gandhak mixed with Naari stanya & quenched in Gandhak Taila.	-	Rasratnakar [26]
Nirvapa	Vajra kept in a bolus of Snuhi swaras + Raupya makshik → heated & quenched in ashwamutra	7 times	Rasratnakar [26]
Nirvapa	Vajra coated with Matkun rakta for 7 days → heated → quenched in Aparijita & Petha Swaras.	100 times	Rasratnakar [26]
Gajputa	Vajra kept in bolus of kalka of 3yrs old karpasmool + Nagbala beej	7 times	Rasendrasambhav [27]
Gajputa	Shudha vajra churna + Rassindura + Shudh manshila + shudh gandhak	14 times	Rasendrasambhav [27] Rasamrit [31]
Nirvapa	Heated & quenched in Gardabh mutra → coated by paste of shudh hartala + Matkun rakta → heated & quenching in ashwamutra.	21 times	Rasapradeep [30]
Varahaputa Nirvapa	Four Bhavana of matkun rakta & covered with Mushika mansa, subjected to heat. Later quenched in kulatha kwatha for 100 times	30 times	RRS [8]
Gajaputa	Inside of musha is coated with mix of Kulatha kwatha + Lakucha + manahshila → subjected to heat	100 times	RRS [8]
Nirvapa	Vajra smeared with Matkun rakta for 7 times → heated red hot → quenched in Kasmarda Swarasa	7 times	RRS8
Gajaputa	Mardana of Vajra with Neeljyoti Kanda & dried in sunlight	-	RRS [8]
Gajaputa	Vajra in a sharava is smeared with kalka of Madanphala Swarasa + Bhunaga	20 times	RRS [8]
Gajaputa	Mardana of equal quantities of Vajra Chruna + Shudh Hartala + Shudha Gandhaka + Shudh Hingula + Swarnmakshika bhasma with Rajkola Swaras → 7 bhavana of Peepal Twak Swaras	-	RT [3]
Gajaputa	Shudha Vajra Churna + Parada Bhasma + Shudh Manahshila + Shudha Gandhak	14 times	RT [3]
Mahaputa	Shudha Vajra Churna + Shudh Hartala + Shudh Manahshila with swarasa of Karpa mool swarasa	14 times	RT [3]
Nirvapa	Shudha Vajra is kept inside a bolus of Hartala & Matkun Rakta → heated → quenched in ashwamutra	21 times	Sharangdhar [18]

**Table 7: Summarized methods of Vajra Marana as per Rasajalanidhi**

	RJN [28]
Shvet (White)	Coated on all sides with a paste made of Ashwattha, Badri, Jhinti, Makshikam, Crab shell, all rubbed together with an equal quantity of Snuhiksheer. (Gajaputa)
	Kept inside lump made of Patalgaruri, Gandhak, Orpiment and rubbed with Badri rasa, subjected to Bhavana first with juice of Ashwatha
Rakta (Red)	Coated on all sides with a paste made of karvira, Meshashringi, Badara, Udumbara, all rubbed with equal quantity of arka ksheer (Gajaputa)
	Confined within a lump of Nili, Powdered conch shell, Manahshila, Bhunaga, Shurana

	<b>RJN [28]</b>
Peet (Yellow)	Coated on all side by paste of Bala, Atibala, Gandhak, Kachapasthi, all rubbed with equal quantity of Indravaruni dugdha (Gajaputa) Subjected to heat after having been rubbed with Latex of Snuhi, Karavira, Vata, Indravaruni mixed with Bhunaga & Hingula
Krishn (Black)	Subjected to heat after having been coated on all sides with a paste made of shurana, rasona, conch shell, manahshila, rubbed with equal quantity of vata ksheer (Gajaputa) Heated in a crucible, inner surface of which is coated with a paste made of Gandhak, Ghrita, Hartala, Meshashringa, Vatsanabha, Loadstone, Arka ksheer, menstrual excretion of women equal in quantity and rubbed with godugdha

**Table 8: Summarized methods of Vajra Marana as per Brihatrasajundar**

	<b>BRRS [14]</b>
Brahman	Chirhint, Gandhak, Hartala, Badar swarasa, Peepala patra swarasa
Kshatriya	Neel, Shankh churna, Manahshila, Bhunaga, Surana swarasa,
Vaishya	Snuhi, Arka, Kaner, Bhunaga, Hingul, Vata ksheer, Uttam Varuni
Shudra	Gandhak, Ghrita, Hartala, Meshashringi, Visha, Kantloha, Snuhi ksheer, Stree pushp & paya

**Table 9: Ashodhita Vajra Dosha**

<b>Dosha</b>	<b>Name of the Text</b>
Parshvapeeda (Pain in flanks)	Rasendrasaarsangraha [29], Rastarangini [3], Rasendrasambhav [27], Rasajalnidhi [28], BN [19], BRRS [14], SN [22], Ayu Prak [13]
Pandu roga (Anaemia)	Rasendrasaarsangraha [29], Rasendrasambhav [27], Rasajalnidhi [28], BN [19], BRRS [14], SN [22], Ayu Prak [13]
Hrillasa (Palpitations)	Rasendrasaarsangraha [29]
Daha (Burning sensation)	Rasendrasaarsangraha [29]
Guruta (Heaviness)	Rasendrasaarsangraha [29], Rasajalnidhi [28], BRRS [14], SN [22]
Rakta vikrati (Blood disorders)	Rastarangini [3]
Kushtha (Skin disorders)	Rastarangini [3], Rasendrasambhav [27], Rasajalnidhi [28], BRRS, SN, Ayu Prak [13], BN [19]
Taap vridhi (Hyperthermia)	Rastarangini [3], SN [22]
Bhrama (Dizziness)	Rastarangini [3],
Murchha (Syncope)	Rastarangini [3],
Hridshool	Rasendrasambhav [27]
Shotha (Inflammation)	Rasajalnidhi [28]
Pangu	BN [19]
Jwara (Fever)	BRRS [14]
Santapa	Ayu Prak [13]
Jadta	Ayu Prak [13], Rasajalnidhi [28]

**Pratyashadha (Antidote) for Vajra janya Vikara [14] (BRRS)-** Sevan of Sita madhu ghrut dugdha for 7 days.

**Properties of Vajra Bhasma:** As per Ayurved Prakash [13], Bhasma of Vajra is said to be white like Shankha or Moon. (Ay.Pr 5/84) It is Ayushya, Vrishya, Tridoshanashak, Parad bandhan, Amrit, Akaal mrityu nashak [25], Hridaya, Yogvahi, Rasayana [3], Varnya [27].

**Vajra Aamyik Prayog (Therapeutic Indications):** Rajyakshma, Prameha, Medo vikara, Pandu, Shotha, Udara Roga, Napunsakta, Vrishya, Aayuvardhak, Netrya, Balvardhak, Tridoshanashak, Varnya, Medhavardhak [3], Shosha, Jwara, Bhagandara, Meda, and Varnya [14].

**Dose [3]:** 1/32 – 1/16 ratti, 1 ratti heeraka bhasma + 4 masha Rassindur given in dose of 1-2 ratti

#### **Anupana [3]**

1. Kushtha: Khadir twak kwath
2. Vatvyadhi, Vatrakta: Aadrak ras + madhu
3. Kasa, Shwasa: Vasa swarasa, maricha, Dalchini, Pippali
4. Pitta, Daha: Sita
5. Jwara: Giloy & Chirayta kwatha

#### **Concept of Ratna Druti (Liquefaction)**

- Make a bolus of Hing, Panch lavana, 2 kshaar, Tankana, Navsadar, Amlvetas, Jaipala beej, Chitrakmool, Rudanti, Vanshlochan, Jambu swaras, Dravantimool, Arkadugdha, Snuhidugdha,
- Keep churna of any ratna in this bolus and cover with burjpatra. After tieing with Silk cloth, keep in



dolayantra filled with amla or kanji for 3 days. On 4<sup>th</sup> day take it out and wash with amla liquid. Kalka is washed out. Store the druti in glass container.

#### Vajra Druti as per classical texts

1. **Rasratnasamuchyay** – As mentioned in Rasaratna Samuchhaya, the churna of Vajra (Diamond) is kept in round shaped kalka (fine paste) of Vajra valli (Asthi-samhar) (Cissus quadrangularis) and this kalka bolus is wrapped in bhurjapatra. Again, it is wrapped in cloth and pottali is made. This pottali is subjected to heat in dolayantra containing Amla dravya swaras

and Kanji for continuous seven days. The druti of Vajra will be obtained [8].

2. **Brihat Ras Raj Sundar** - Vajra kept in kalka of vajravalli, subjected to puta, after niruthha, Swedan in amlavarga containing patra [14].
3. **Rasratnakar** - After covering in Vajravalli, it is boiled for 7 days in a container having water. Sukshma churna of Vajra with amlvetas is kept inside water for 7 days. After that day, heated in a puta [26].
4. **Rasendra Sambhav** - Vajra kept in kalka of vajravalli subjected to swedan in container of Amlavarga [27].

**Table 10: Some Yoga (Formulations) of Vajra**

Formulation	Ingredients	Dose with Anupana	Therapeutic Indication
<b>Vajra Rasayana [9]</b>	Mardan of bhunagsatva (1 part) + Vajra bhasma + Swarna bhasma → heated & Parada bhasma is added.	½ ratti with madhu	Rasayana
<b>Vajrapottali Rasayana [9]</b>	Mardan of Parada bhasma (3 parts) + Vajra Bhasma (1 part) in Kumari swarasa → made in a pottali → paka in gandhak		Mukha, dant strengthening
<b>Vajra Rasayana [9]</b>	Heeraka Bhasma (20 part) + Swarna bhasma (16 part) + Rajata Bhasma (8 part) + Parada Bhasma (10 part) + Abhraksatva bhasma (10 part) + Swarnamakshik Bhasma (4 part) + Vaikrant bhasma (8 part) + Shudha Gandhak (6 part)		Rasayana
<b>Vajra Rasayana [8]</b>	Heeraka Bhasma (30 part) + Swarna bhasma (16 part) + Rajata Bhasma (8 part) + Naga Bhasma (11 part) + Abhraka Bhasma (4 part) + Swarnamakshik Bhasma (8 part) + Vaikrant bhasma (6 part)		Dehasiddhi
<b>KandarpKokil Rasa [3]</b>	Heeraka bhasma + Rassindur + Karpur + Khaand + Ela Churna	Godugdha for 6 months	Vrishya, Netrya, Medhya, Sundarta, Pachanshakti, Bala vridhhi
<b>Heeraka Rasayana [3]</b>	Heeraka Bhasma (1 part) + Tarkshya Bhasma (2 part) + Manikya Bhasma (3 part) + Pukhrajya Bhasma (4 part) + Neelam Bhasma (5 part) + Vaidurya Bhasma (6 part) + Gomeda Bhasma (7 part) + Mukta Bhasma (8 part) + Pravala Bhasma (9 part)		Rasayana Balvardhak
<b>Heeraka Yoga [14]</b>	Heeraka bhasma 1 part + Parada bhasma ½ part with equal quantity of abhrak satva	Ghrita + madhu 1 ratti	BRRS
<b>Heeraka Yoga [14]</b>	Heeraka Bhasma (30 part) + Swarna bhasma (16 part) + Rajata Bhasma (8 part) + Abhraka Bhasma (14 part) + Swarnamakshik Bhasma (8 part) + Singya visha (11 part)		BRRS
<b>Heeravedhya Rasa [32]</b>	Shudha Parada (2 tola) + Audbhida Lavana (4 tola) + Vajra (2 ratti) + Nagvalli patra (6 masha) + Shudh Swarnpatra (6 masha) + Khar mutra		Raschintamani <sup>32</sup>
<b>Heeravedhya Rasa (2) [32]</b>	Vajra Bhasma (2 parts) + Abhrak Bhasma (3 parts) + Parada Bhasma (4 parts) + Shudh Gandhak (6 parts) + Loha Bhasma (2 parts) + Rajata Bhasma (4 parts) + Gorochan + Brahmsauvarchala Swaras	Maricha Churna + Tambul Swaras	Raschintamani <sup>32</sup>

**Table 11: Different summarized methods of Vajra Mridukaran & Draavan**

<b>Rasarnav [12]</b>	Vajra kept in cavity less Asthishrinkhala in water vessel → Swedana for 1 week Mardana with Kshartraya, Hingu, Chanakmla, Amlavetasa. Raktchitraka, Sthalkumbhi + Snuhiksheer → Swedana in Dolayantra Bhawana of Vajra with Amlvetas for 1 week → kept in nimbu then in Dhanyarashi → Putpaka
<b>Rasendramangal [33]</b>	Diamond scraps with paste of Mesasringa, bone of serpent & tortoise, shilajit, Sunhi, Talaraja, menstrual fluid, human milk, ash or Kantapashana → subjected to high temperature → melted, poured into decoction of the Kodrava + Kulattha + horse urine → Kapalika Yoga (Ash) Also, used for Vaikranta, Tapyta, Naga, Tikshna & Kantasma. Diamond scraps with Vajri latex + Arka along + borax kept in crucible → subjected on the fire of Khadira. It is repeated for one hundred times. Agastya Pushp + menses fluid + Gorasana well triturated with scraps of diamond → subjected to roasting calcifies it. Kantasma, Mesasringa, Silajatu, sulphur, tri-alkalies, orpiment with latex of Snuhi and Arka → entitled Vajraka Yoga Diamond scraps under Asthishrinkhala subjected on steam-bath for seven days → melts diamond.
<b>Rasratnakar Riddhi Khanda [26]</b>	Vajra is kept in Bijora nimbu, smeared with mitti → paka (100 times) → mardan with nagvalli swarasa → kept for 1 prahar in nagvalli patra. Vajra kept in Jambiri Nimbu → Swedan in Kulatha kwath/Triphala kwath for 24 hrs. Procedure repeated for 3 times. Vajra placed inside a paste of Parad + Tikshna churna + amlavarga → dipped in Nagvalli swaras → kept under dhanyarashi. Vajra placed in a bolus of Parada + Amlavarga + kantpashana + Vajra + Kantloha churna → covered with paste of Nimba + Karpasa + Badara leaves
<b>BRRS [14]</b>	Keep vajra in bijora nimbu → 100 puta given → covered with nagvalli & buried in ground.
<b>Rasajalanidhi [28]</b>	Softening of Diamond Diamond, confined in matulunga covered on all sides with mud → subjected to heat by Gajaputa (100 times) → Next, smeared with tambula (betel) leaves swarasa → wrapped with tambula patra → buried deep into the earth for some time → softening of the diamond. Ashes of diamond kept inside an asthisanhara → immersed in amla dravya ie, lime juice → heated for 7 days → liquid.

## CONCLUSION & DISCUSSION

In the Vedic period, Vajra was not utilized for medicinal purposes. However, since the time of the Samhita Kala, it has found therapeutic applications in various disorders, including Kushtha (skin diseases), Vajikaran (aphrodisiac), Netra Roga (eye diseases), Vataja Roga (disorders related to Vata Dosh) and Visha Chikitsa (treatment of toxins). Samhitas provides insights into the therapeutic uses and applications of Vajra. In classical texts of Rasa Shastra, a comprehensive account of Vajra is presented, encompassing its synonyms, mythological origin, indications, contraindications, adverse effects, purification (Shodhana), incineration (Marana), preparation of suitable forms (Satvapatana, Mridukarana, Druti nirman) and various formulations. Different Acharyas have categorized Vajra under Ratna varga (gem category) in Rasashastra texts. On evaluating the properties of Vajra, it is generally described as possessing Shadrassa (six tastes), Snigdha (unctuousness) and Tridosha shamaka (balancing all three Doshas) properties. It is considered Ayuprada (promoting longevity), Param Hridya (excellent for the heart), Yogavahi (enhancing the efficacy of other substances), Vrishyatama (best among aphrodisiacs), Vayastambhakara (slowing down the aging process), Kaantijanana (enhancing radiance), Saukhya janan (promoting well-being), Rasayana

(rejuvenative), Rasamaraka (enhancing the essence of tissues), Netrya (beneficial for the eyes), Medhya (improving cognitive functions) and Rasabandhakara (binding essence). Vajra is indicated for a wide range of conditions, including Sakalaroga (various diseases), Vali-Palitya (aging-related conditions), Rajyakshma (tuberculosis), Prameha (urinary disorders), Medoroga (obesity), Pandu (anemia), Shotha (edema) and Udara Roga (abdominal disorders).

Classical texts have described different varieties of Vajra based on colour and properties. Most authors have categorized Vajra into four types: Shwet (white), Rakta (red), Peet (yellow) and Krishna (black), with these categories ranked in decreasing order of quality. Additionally, Vajra can also be classified into Brahman, Kshatriya, Vaishya and Kshudra types based on Jati (classification) while based on its intended use, it can be categorized into Purush, Stree, and Napunsak varieties. Numerous methods for the Shodhan (purification), Marana (incineration), Mridukaran (making it malleable) and Druti preparation of Vajra have been elaborated in almost all classical texts. It is emphasized that Ashodhita (impure) Vajra can be harmful to the body and Shodhana as well as Marana processes are essential to eliminate any doshas (morbid factors). Improper Shodhan can lead to complications

such as Vamana (vomiting), Kushtha (skin diseases), Prameha (urinary disorders), Parshvapeeda (flank pain), Pandu roga (anemia), Hrilasa (nausea), Murchha (fainting), Hridshool (chest pain), Shotha (edema) and Jwara (fever).

Vajra is highly esteemed and classified as the most precious Ratna (gem) in the "Ratna Varga" classification. Composed of pure carbon, Vajra, also known as Diamond, stands as the hardest naturally occurring substance known. Its remarkable hardness, brilliance and sparkle make it unparalleled as a gemstone. Diamonds can range in color from colorless to black, with varying degrees of transparency, translucency or opacity. The most highly prized diamonds are those that are colorless or possess a pale blue hue, although such specimens are quite rare, as most gem-quality diamonds exhibit a subtle yellow tint. Thus, this article aims to impart a detailed description of Vajra, an exquisite carbon.

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