



Research Article

A REVIEW ON JALANDHAR BANDHA AND ITS APPLIED ASPECTS

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ABSTRACT

Yoga not only has the concepts but also the tools and technology needed for us to find out and realize "Our Self". *Hathayoga* is considered as *Sadhana* or medium to achieve *Rajyoga*. *Bandha* is a special characteristic of *Hathayoga*. The 4 types of *bandhas* viz., *Jalandhar Bandha*, *Uddiyan Bandha*, *Mul Bandha* and *Maha Bandha*. The aims and objectives of this review article is to Compile and commemorate the classical references of *Jalandhar Bandha* and its applied aspects. Various yogic texts like *Hatha Yoga Pradeepika*, *Gheranda Samhita* and the *Siva Samhita* etc., described *Jalandhara Bandha* very well. *Jalandhara bandha* is extremely useful for alleviating throat disorders. It also improves the quality of the voice and increases mental relaxation, relieving stress, anxiety and anger may be effective in several psychosomatic disorders. The stimulus on the throat helps to balance thyroid function and helpful in metabolic disorders. It may protect the brain, eyes, and inner ears from the internal pressure of the retained breath. Applied *Jalandhar Bandha* technique is also useful in *Danta Nirharana kriya*. This review on *Jalandhar Bandha* can play a major role in applied science, to prevent various psychosomatic diseases without creating any side effects. Many more literary and clinical study must be planned to validate classical references to establish its authenticity in modern scientific scenario.

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INTRODUCTION

Yoga is a group of physical, mental, and spiritual practices or disciplines which originated in ancient India.<sup>i</sup> It is a holistic, science of man and indeed the only science that deals simultaneously with all aspects of the philosophy, psychology and practicality of conscious evolution. Yoga not only has the concepts but also the tools and technology needed for us to find out and realize "Our Self".<sup>ii</sup>

In *Sanskrit*, the word *yoga* comes from the root *yuj* which means "to add", "to join", "to unite", or "to attach" in its most common senses; as such. All further developments of the sense of this word are post-Vedic. More prosaic moods such as "exertion", "endeavor", "zeal", and "diligence" are also found in Indian epic poetry.<sup>iii</sup>

There are very many compound words containing *yoga* in *Sanskrit*. *Yoga* can take on meanings such as "connection", "contact", "union", "method", "application", "addition" and "performance". In simpler words, *Yoga* also means "combined".<sup>iv</sup> So *Yoga* is the union of self (*Aatma*) with ultimate (*Parmaatma*).<sup>v</sup>

This hypothesis further postulates that mind controls matter and hence, by controlling mind the human being may control matter. This further suggests that health and happiness are our birthright and that *Moksha* or freedom from all limitation, is the goal of human existence which helps to overcome all Kinds of Suffering. General Laws governing mind, emotions and body have been discovered that Laws of *Sanatana Dharma* produces peace of mind, health, happiness and spiritual evolution. The truth of this is proven as fact by the example of great Yogis who have lived in obedience to these laws. These laws were then taught to their disciples by these illustrious *Yogis* and passed on through various *Parampara*.<sup>vi</sup> *Yoga* is basically developed as a *Moksha Shastra* which helps to overcome all Kinds of Suffering. It signifies both the means and the end. It is the aim of human existence. *Hatha yoga* and *Rajyoga* are the known types of *Yoga* where *Hatha yoga* is considered as *Sadhana* or medium to achieve *Rajyoga*.

Aims and Objectives

- To Compile and commemorate the classical references of *Jalandhar Bandha*.
- To Study and understand applied aspects of *Jalandhar Bandha*.

"**BANDHA**": *Bandha* is a special characteristic of *Hatha Yoga*. The *Sanskrita* word *Bandha* means to hold, tighten or lock, so *Bandha* is a position in which certain organs or parts

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of the body are gripped, contracted or controlled.<sup>vii</sup> Traditionally, *bandhas* were classified as part of *mudras*, and were handed down by word of mouth from guru to *Shishya*. The *Hatha Yoga Praipika and Gheranda Samhita* deals with *bandhas* and *mudras* together and the ancient tantric texts also make no distinction between the two. *Bandhas* are extensively incorporated in *mudra* as well as *pranayama* techniques.<sup>viii</sup> The various types of *bandhas* have been described in Yoga texts. However none of them defines the term "*Bandha*" as such.

#### The 4 types of bandhas are

1. *Jalandhar Bandha*,
2. *Uddiyan Bandha*
3. *Mul Bandha*
4. *Maha Bandha*- Combination of above 3 *bandhas*.

*Bandha* may be defined as a particular action involving pressure or strain on the muscles. It is expected in *Yoga* to retain a firm pose in *bandha* as it is retained in the *asanas*. The *bandhas* are to be studied mainly while studying *pranayama*. The purpose of *Bandhas* is to lock the *prana* flow in particular area and redirect in to *Sushumna Naadi* for spiritual awakening.

In the present article, review on *Jalandhar Bandha* has been done, in which its spiritual and scientific concepts, procedure / technique, mode of action, applied aspects indication, and contraindication etc are discussed.

**Jalandhar bandha:** *Jalandhara Bandha* is described in the yogic texts *Hatha Yoga Pradeepika*, *Gheranda Samhita* and the *Siva Samhita*. *Jalandhara Bandha* is said to activate the *Vishuddhi or Vishuddha Chakra*.<sup>ix</sup>

*Jalandhar Bandha* should be practiced after the practice of *asanas* and *pranayama* and before the practice of *dhyana* or meditation. *Jalandhara Bandha* is classified under the section of *mudras* or the psychic gestures In both the classical texts *Gheranda Samhita* and *Hatha Yoga Pradeepika*. Even though *Bandhas* are technically not same as *mudras*, but both are clubbed together as they induce a certain channeling of energy in the body which is conducive for higher practices of *dhyana* and *Samadhi*. Once it is mastered, it is done along with *pranayama* and *mudras* and before the practice of meditation.<sup>x</sup> The word *Jalandhar* is made up of two words 'Jalam' and 'Dhar'. *Jal* means 'Net', some *acharya* considered it as 'throat,' *dhar* means 'supporting' or 'a tubular vessel in the body.' The chin lock associated with cervical flexion or throat lock known as *Jalandhar bandha* which helps to prevent the fluid of *bindu* from flowing further down than *vishuddha*.

The chin-lock of *Jalandhar bandha* completes the action of axial extension and essentially freezes out the normal respiratory shape changes of breathing. This is when the unusual pattern of breath associated with *mahamudra* can arise deep in the core of the system (*sushumna*) *Jalandhara* (chin lock), sternocleidomastoids bilaterally to flex skull on spine.<sup>xi</sup>

This *bandha* can be achieved without getting into any *asana* pose. But generally, it is studied in *Padmasan* or any other *asana* specified for *Dhyana* Process. *Padmasana* or *Siddhasana* are considered as the best positions to practice this *bandha*.

#### Review of Literature

According to *Hathayoga pradeepika*, contract the throat and press the chin firmly against the chest is called *Jalandhar Bandha*, which destroys old age and death.<sup>xii</sup> It stops the opening (hole) of the group of the *Nadis*, through which the juice from the sky (from the Soma or Chandra in the brain) falls down. It is, therefore, called the *Jalandhar Bandha*<sup>xiii</sup> — the destroyer of a host of diseases of the throat<sup>xiv</sup>. In *Jalandhar Bandha*, the indications of a perfect contraction of throat are, that the nectar does not fall into the fire (the *Surya* situated in the navel), and the air is not disturbed. The two *Nadi*'s should be stopped firmly by contracting the throat. This is called the middle circuit or centre (*madhya Chakra*), and it stops the 16 *adhara*<sup>xv</sup> (i.e., vital parts).<sup>xvi</sup>

The sixteen vital parts mentioned by renowned *Yogis* are the (1) thumbs, (2) ankles, (3) knees, (4) thighs, (5) the prepuce, (6) organs of generation, (7) the navel, (8) the heart, (9) the neck, (10) the throat, (11) the palate, (12) the nose, (13) the middle of the eyebrows, (14) the forehead, (15) the head and (16) the *Brahmarandhra*.

*Gheranda Samhita* has also described the *Jalandhar bandha* as under; The chin is to be pressed onto the heart after contracting the throat. This *Jalandhar Bandha* supports sixteen types of *bandhas* and destroys death.<sup>xvii</sup> *Jalandhar Bandha* is *Swayamsiddha* and the *sadhaka* who practises this *bandha* for six months will, no doubt, achieve *siddha* status.<sup>xviii</sup>

In *Shiva Samhita* it is also mentioned that person can achieve *Amaratwa* by practising *Jalandhar Bandha*.<sup>xix</sup>

In the texts, the description as well as the effects of the *bandha* is more or less the same. All the texts have assured that the *bandha* causes destruction of old age and death. Observing this *bandha* gives peace and calmness to both, the heart and the mind. This in turn increases the lifetime of the *sadhaka*.

#### Technique



Figure 1

- Sit comfortably in *siddhasana*, *siddha yoni asana*, *padmasana*, *sukhasana* or *vajrasana*.
- Place the palms of the hands on the knees and allow the whole body to relax.

- Inhale slowly and deeply and retain the breath. Lower the chin so that it touches the chest, or more specifically the collarbone. Simultaneously, straighten the elbows and raise the shoulders. Hold for as long as is comfortable. Then release *Jalandhar* by slowly raising the head and relaxing the shoulders.
- Exhale in a very slow and controlled manner. Practice five rounds, breathing normally for a minute or two between each round. Then practice five rounds with external retention. *Jalandhar* can be done in the same standing position as used for *uddiyana bandha* or *navli karma*.
- However, it is usually practiced in conjunction with *pranayama* and other major *kriyas* involving breath retention. Initially it can be done separately until you become accustomed to it. As it is such an easy practice, this will not take long.<sup>xx</sup>

### **Duration**

This *bandha* is to be observed after *Pooraka* and before *Kumbhaka*. After *Kumbhaka*, the *bandha* is to be released before practising *Rechaka*. Hence, the duration of *Kumbhaka* is the duration for this *bandha* too. Instead of practising this *bandha* independently, it is to be practised while practising *Pranayama*.<sup>xxi</sup>

*Jalandhar bandha* can be held for as long as the practitioner is able to comfortably retain the breath. Maintain a count while retaining the breath and gradually increase the count. This practice may be repeated up to 5 times.<sup>xxii</sup>

**Awareness:** on the throat pit and sensations connected with breath retention.

### **Variation**

In *kriya yoga* a more simple and subtle form of *Jalandhar bandha* is practiced where the head is simply bent forward so that the chin presses the neck. This variation is commonly used in association with *pranayama* practices.

**Breathing:** The practice is performed during internal retention. It may also be performed with external breath retention.

**Practice note:** Do not exhale or inhale until the chin lock and arm lock have been released and the head is fully upright. If suffocation is felt, end the practice and rest. Once the sensation has passed, resume the practice.

### **Yogic and Spiritual Concepts of Jalandhar Bandha**

When *Jalandhar bandha* is performed, the flow of *shakti* in *ida - pingala* is arrested and prevented from flowing between the head and the body. There is a subtle restructuring in the energy circuit, and the energy which had been flowing in *ida - pingala* is induced to flow through *sushumna*. Thus *ida - pingala* are described as becoming inert or paralyzed. The middle *chakra* between the physical body and the brain centres is known as *vishuddha chakra*. By firmly contracting the throat, the sixteen *adharas* of the middle *chakra* are locked and collect *prana* in *vishuddha chakra*. *Vishuddha* is described as a deep purple lotus which has sixteen petals called *adharas* which means 'support' or 'receptacle which contains a particular fluid.' Each petal or *adhara* has a specific potential power or force. The eighth petal is said to contain poison, the sixteenth *amrit* (nectar). The potential force of each petal is represented by the *beeja mantras*; *Am, Aam, Im, Eem, Um,*

*Oum, Rim, Reem, Lrim, Lreem, Em, Aim, Om, Aum, Ah, Amh.* These *beeja* mantras relate to various bodily functions, mental and psychic and even subtler capacities. It is said that the realization through the first fifteen letters is the dissolution of conscious, subconscious and unconscious into *Atma*, i.e. *Om*. Sixteen petals or *adharas* are also found on the *Sri Yantra* and the *shakti* or potential forces of each are: desire, intellect, ego, sound, touch, form, taste, smell, *chitta*, steadfastness, memory, attraction by speech, growth, the subtle body, revivification and the gross body. These are also called the *adhi devatas* of the *pancha tattwas*, *gyanendriya* and *karmendriya*. The sixteenth petal, known as *Adya Satchidananda roopini*, is in the form of the supreme Self. These petals, as the phases of the waxing moon, denote ambrosia, life giving, growth, contentment, nourishment, attachment, constancy, containing the man in the moon, light spreading, effulgent, moonlight, prosperity, delight, limb developing, fullness, and full of nectar. Below *vishuddha* the *chakras* are concerned with the four *mahabhutas* but above *vishuddha*, *shakti* comes directly into contact with consciousness.<sup>xxiii</sup>

These three *bandhas* act directly on the three *granthis* or psychic knots. *Moola bandha* is associated with *brahma granthi*, *uddiyana bandha* with *viṣṇu granthi* and *Jalandhara bandha* with *rudra granthi*. The *granthis* prevent the fine flow of *prana* along *sushumna nadi* and thus impede the awakening of the *chakras* and the rising of *kundalini*. The final knot is *rudra granthi*, which is associated with *vishuddha* and *aagya chakras*. *Vishuddha* and *aagya* sustain *vigyanamaya kosha*, the intuitive or higher mental body, and represent the transformation of an existing form, idea or concept into its universal aspect. When *rudra granthi* is pierced, individuality is dropped and the old ego identification is left behind and the experience of unmanifest consciousness, beyond the mental universe, emerges at *aagya* and *sahasrara chakras*.<sup>xxiv</sup>

### **Mode of Action**

- *Jalandhar Bandha* exerts pressure on many major nerve fibres pass through the neck and the flow of nervous impulses to the brain is restricted. These impulses collect in the cervical plexus and when the *bandha* is released they flood into the brain. The force of these impulses helps to activate higher centres in the brain. Hormonal secretions of the pituitary flow through the blood stream to the various endocrine glands, the life process associated with these centres is set into motion. These processes of metabolism, the response to stress, instinctual life etc., endured and experienced throughout a lifetime, cause the body to become degenerate, exhausted and decrepit.
- Having done *Jalandhar bandha* by contracting the throat, the nectar does not fall into the gastric fire and the *prana* is not agitated. This is the mechanism of experience of external reality mediated through the sensory and motor organs. It is also the medium leading inevitably to decay and death of the body.
- The throat region is intermediate between the brain and the digestive and assimilative processes. The thyroid gland secretes the hormone thyroxin (T4), which is responsible for the rate of tissue metabolism (i.e. the rate of nutrient consumption and of cell turnover and tissue ageing). This gland is situated precisely here, in the front of the neck, where the *yogis* visualize the pool of nectar. By applying *Jalandhar bandha* this fleshy gland is

squeezed. The nerve stimuli and blood flow to and from the gland are modified, and the secretory responses of the gland are modulated.

- The *bandha* also affects "*Vigyana Nadi*" which passes through the neck. It is the only blood vessel passing below the neck divided into two parts, which move towards the brain. These are known as Carotid Arteries pass from both the sides of the neck to the brain. The heartbeats can be easily felt if the neck is bent backwards; the pulse is felt on both the sides below the jaw. The area where the blood vessel is divided into two parts is a little bit flat and is known as Carotid Sinus. The wall covering Carotid Sinus is thin and can easily get affected by inner or outside pressure. The nerve passing from here to the brain is known as Carotid Nerve. It goes high up into the skull and then down into the brain. This nerve is related to internal carotid, external carotid and carotid sinus. The pressure exerted on this nerve is transmitted to the brain. The pressure can be exerted from outside too. This process is attempted in the *Jalandhar Bandha*. Due to the peculiar position of the neck, the pressure is exerted on carotid sinus and the nerves are activated to send a signal to the brain.

#### Physical Effects:<sup>xxv</sup>

- Physical effects were noticed that the circulation of blood increases thereby increasing the efficiency of the spinal cord.
- Due to pressure exerted on carotid plexus (nerves, vessels and sinuses) the brain activates its machinery to lower the blood pressure, so that the muscles of the heart start functioning slowly and the heart beats are reduced. The *bandha* lessens the blood supply to the carotid artery which reduces the blood supply to the brain slows down the body activities and create complete stillness of body and mind.
- The *yoga sadhaka* can achieve such elated state of mind. However, with even a little bit of study and practice of this *bandha*, *sadhaka* can achieve calm and quiet mind devoid of any thoughts and the nearly lifeless body. The state is pleasurable.

#### Benefits

The full form of *Jalandhar bandha* compresses the carotid sinuses, which are located on the carotid arteries, the main arteries in the neck. The simple variation exerts a subtler pressure.

- These sinuses help to regulate the **circulatory and respiratory systems**. Normally, a decrease in oxygen and increase in carbon dioxide in the body leads to an increased heart rate and heavier breathing. By exerting pressure on carotid sinuses, decreased heart rate and increased breath retention produces mental relaxation, relieving stress, anxiety and anger. It develops meditative introversion and one-pointedness. The stimulus on the throat helps to balance thyroid function and regulate the metabolism.<sup>xxvi</sup>
- Prevents the retained breath from "leaking out" of the torso through the throat Protects the brain, eyes, and inner ears from the internal pressure of the retained breath.<sup>xxvii</sup>

- Concentrates the secretions of the glandular system, thereby increasing their interconnection.
- Regulates blood pressure. In *pranayama*, there is a possibility of increasing the blood pressure while performing *Kumbhaka*. Hence, achieving *Jalandhar Bandha* before *Kumbhaka* automatically results in controlling the blood pressure. This is a major benefit of *Jalandhar Bandha*.
- Minimizes external distractions.
- Seals energy in the brain stem and moon centre (chin).
- Directs *pranic* energy into the central channel, calming the heart.<sup>xxviii</sup>

**Precaution:** During *Pranayama*, the *bandha* is to be observed after *Pooraka*. *Rechaka* is to be practised after *Kumbhaka*, after releasing the *bandha*. *Rechaka* should not be observed while being in this *bandha*.<sup>xxix</sup> The *bandha* is advised in *Pranayama* after *Pooraka*. *Kumbhaka* is observed after *Pooraka*. At the time of observing *Kumbhaka*, the increased pressure on the inhaled air, results in air trying to find out an escape route. Since the usual path of escape i.e the nostrils are closed, the air tries to enter Eustachian tube and finds a way behind the ear drums. The increased pressure on the eardrums is not advisable and can cause a lot of complaints. However, the position of the pressed neck in *Jalandhar Bandha* stops this inhaled air from entering into these routes and the eardrums are saved from the ill effects

#### Contra-indications

- Approach the practice of all *bandhas* and body *mudras* cautiously.
- Avoid this *bandha* if you have a neck injury.<sup>xxx</sup>
- People suffering from cervical spondylosis, high intracranial pressure, vertigo, high blood pressure or heart disease should not practise *Jalandhar bandha*.
- The *bandha* is not to be practised by persons suffering from breath related problems
- Stop the practice if dizziness or vertigo is felt.<sup>xxxi</sup>

Although the neck lock reduces blood pressure, long retention of the breath strains the heart. *Jalandhar bandha* is the first *bandha* to be taught as the effects are light and soothing.<sup>xxxii</sup>

#### Applications

- *Jalandhara bandha* is extremely useful for alleviating throat disorders such as inflammation, stuttering, excess mucus in the throat, tonsillitis, etc. It also improves the quality of the voice and increases the quantum of *prana* in the thoracic region.
- It develops meditative introversion and one-pointedness produce mental relaxation, relieving stress, anxiety and anger may be effective in several psychosomatic disorders.
- The stimulus on the throat helps to balance thyroid function and regulate the metabolism.<sup>xxxiii</sup>
- Prevents the retained breath from "leaking out" of the torso through the throat Protects the brain, eyes, and inner ears from the internal pressure of the retained breath.<sup>xxxiv</sup>
- Applied *Jalandhar Bandha* technique in *Danta Nirharana kriya* (tooth Extraction) :Many of traditional *Danta Vaidyas* from Gujat, Madhyapradesh, Karnataka,

Maharashtra etc are using *Jalandhar Bandha* Technique in Painless tooth extraction.<sup>xxxv, xxxvi, xxxvii</sup>

## CONCLUSION

Practice of *Jalandhar Bandha* may cure throat disorders. It also improves the quality of the voice and increases the quantum of *prana* in the thoracic region. Mental relaxation, relieving stress, anxiety and anger, may be effective in several psychosomatic disorders. The stimulus on the throat helps to balance thyroid function and regulate the metabolism and helpful in metabolic disorders. It may protect the brain, eyes, and inner ears from the internal pressure of the retained breath. Applied *Jalandhar Bandha* technique is also useful in *Danta Nirharana kriya*. It can be concluded by this review that *Jalandhar Bandha* can play a major role in applied science, to prevent various psychosomatic diseases as well as to maintain the Physical, Mental, social and spiritual health without creating any side effects. Many more literary and clinical study must be planned to validate classical references to establish its authenticity in modern scientific scenario.

## References

1. *OED Online*. Oxford University Press. September 2015. Retrieved 9 September 2015. [https://en.wikipedia.org/wiki/Yoga#cite\\_ref-OED\\_1-0](https://en.wikipedia.org/wiki/Yoga#cite_ref-OED_1-0)
2. Understanding The Science of Yoga by Yogacharya Dr Ananda Balayogi Bhavanani Chairman: ICYER at Ananda Ashram, Pondicherry, India. Websites: [www.icyer.com](http://www.icyer.com) and [www.rishiculture.org](http://www.rishiculture.org)
3. *Monier Monier-Williams. A Sanskrit-English Dictionary: ...with Special Reference to Greek, Latin, Gothic, German, Anglo-Saxon.* Clarendon. p. 804. , [https://en.wikipedia.org/wiki/Yoga#cite\\_ref-OED\\_1-0](https://en.wikipedia.org/wiki/Yoga#cite_ref-OED_1-0)
4. [https://en.wikipedia.org/wiki/Yoga#cite\\_ref-OED\\_1-0](https://en.wikipedia.org/wiki/Yoga#cite_ref-OED_1-0)
5. "Pranayama" The modular of life, written by Dr Sarvesh Kumar Agrawal, published by Chaukhamba Orientalia Varanasi Reprint edition 2007, ISBN : 978-81-7637-062-2, chap. 1 ,pp 01
6. UNDERSTANDING THE SCIENCE OF YOGA by Yogacharya Dr ANANDA BALAYOGI BHAVANANI Chairman: ICYER At Ananda Ashram, Pondicherry, India. Websites: [Www.Icyer.Com](http://www.Icyer.Com) And [Www.Rishiculture.Org](http://www.Rishiculture.Org)
7. "Pranayama" The modular of life, written by Dr Sarvesh Kumar Agrawal ,published by Chaukhamba Orientalia Varanasi Reprint edition 2014, ISBN : 978-81-7637-062-2, chap. 04 ,pp 29
8. "Asana Pranayama Mudra Bandha" Swami Satyananda Saraswati Published by Bihar School of Yoga ,First edition 1969 Reprinted 2008, 2009 ISBN: 978-81-86336-14-4 Publisher and distributor: Yoga Publications Trst, Ganga Darshan, Munger, Bihar, India. Website: [ww.biharyoga.net](http://ww.biharyoga.net) , [www.rikhiapeeth.net](http://www.rikhiapeeth.net)
9. <http://www.yogicwayoflife.com/jalandhara-bandha-the-chin-lock/>
10. <http://www.yogicwayoflife.com/jalandhara-bandha-the-chin-lock/>
11. Kaminoff, Leslie. Yoga anatomy/Leslie Kaminoff; illustrated by Sharon Ellis.p. cm. Includes indexes. ISBN-13: 978-0-7360-6278-7 (soft cover) Web site: [www.HumanKinetics.com](http://www.HumanKinetics.com)
12. Hathayoga pradeepika by Paramhansa Swami Anant Bharti published by choukhamba orientaliya delhi, edition 2013, ISBN no: 978-81-89469-52-8 , H.Y.P. 3/70 , pp87-88
13. Hathayoga pradeepika by Paramhansa Swami Anant Bharti published by choukhamba orientaliya delhi, edition 2013, ISBN no: 978-81-89469-52-8 , H.Y.P. 3/71 , pp88
14. Hatha Yoga Pradipika Translated By Pancham Sinh Source Of Etext: [Http:// Sacredtexts.Com](http://Sacredtexts.Com))
15. Hathayoga pradeepika by Paramhansa Swami Anant Bharti published by choukhamba orientaliya delhi, edition 2013, ISBN no: 978-81-89469-52-8 , H.Y.P. 3/72, pp 88
16. Hatha Yoga Pradipika Translated By Pancham Sinh Source Of Etext: [Http:// Sacredtexts.Com](http://Sacredtexts.Com)
17. Gheranda Samhita, by Paramhansa Swami Anant Bharti published by choukhamba orientaliya delhi, edition 2013 , ISBN No : 978-81-89469-51-1 , Ghe.Sam. 3/12 pp 59.
18. Gheranda Samhita, by Paramhansa Swami Anant Bharti published by choukhamba orientaliya delhi, edition 2013 , ISBN No : 978-81-89469-51-1 , Ghe.Sam. 3/13 pp 59.
19. Shiv Samhita written by Dr Raghvendra Sharma Raghav , published by Chaukhamba Sanskrit Pratishthan Delhi, Reprint edition 2017 , ISBN 978-81-7084-717-5
20. (Hatha Yoga pradipikalight on Hatha Yoga *Commentary* by Swami Muktibodhananda *Under the Guidance of* Swami Satyananda Saraswati Yoga Publications Trust, Munger, Bihar, India Published by Bihar School of Yoga First edition 1985, Reprinted, 2006 Published by Yoga Publications Trust ISBN: 81-85787-38-7 Website: [www.yogavision.net](http://www.yogavision.net))
21. Understanding the Science of Yoga by Yogacharya Dr Ananda Balayogi Bhavanani Chairman: ICYER At Ananda Ashram, Pondicherry, India. Websites: [www.Icyer.Com](http://www.Icyer.Com) And [www.Rishiculture.Org](http://www.Rishiculture.Org)
22. "Asana Pranayama Mudra Bandha" Swami Satyananda Saraswati Published by Bihar School of Yoga ,First edition 1969 Reprinted 2008, 2009 ISBN: 978-81-86336-14-4 Publisher and distributor: Yoga Publications Trst, Ganga Darshan, Munger, Bihar, India. Website: [ww.biharyoga.net](http://ww.biharyoga.net), [www.rikhiapeeth.net](http://www.rikhiapeeth.net))
23. (Hatha Yoga pradipikalight on Hatha Yoga *Commentary* by Swami Muktibodhananda *Under the Guidance of* Swami Satyananda Saraswati Yoga Publications Trust, Munger, Bihar, India Published by Bihar School of Yoga First edition 1985, Reprinted, 2006 Published by Yoga Publications Trust ISBN: 81-85787-38-7 Website: [www.yogavision.net](http://www.yogavision.net))
24. "Asana Pranayama Mudra Bandha" Swami Satyananda Saraswati Published by Bihar School of Yoga ,First edition 1969 Reprinted 2008, 2009 ISBN: 978-81-86336-14-4 Publisher and distributor: Yoga Publications Trst, Ganga Darshan, Munger, Bihar, India. Website: [ww.biharyoga.net](http://ww.biharyoga.net) , [www.rikhiapeeth.net](http://www.rikhiapeeth.net))
25. Asana Pranayama Mudra Bandha" Swami Satyananda Saraswati Published by Bihar School of Yoga ,First edition 1969 Reprinted 2008, 2009 ISBN: 978-81-86336-14-4 Publisher and distributor: Yoga Publications Trst,

- Ganga Darshan, Munger, Bihar, India. Website: [www.biharyoga.net](http://www.biharyoga.net) , [www.rikhiapeeth.net](http://www.rikhiapeeth.net))
26. Asana Pranayama Mudra Bandha” Swami Satyananda Saraswati Published by Bihar School of Yoga ,First edition 1969 Reprinted 2008, 2009 ISBN: 978-81-86336-14-4 Publisher and distributor: Yoga Publications Trst, Ganga Darshan, Munger, Bihar, India. Website: [www.biharyoga.net](http://www.biharyoga.net) , [www.rikhiapeeth.net](http://www.rikhiapeeth.net))
  27. <https://www.yogajournal.com/poses/net-bearer-bond>
  28. <https://www.3ho.org/kundalini-yoga/bandhas/four-main-body-locks>
  29. Understanding the Science of Yoga by Yogacharya Dr Ananda Balayogi Bhavanani Chairman: ICYER At Ananda Ashram, Pondicherry, India. Websites: [www.Icyer.Com](http://www.Icyer.Com) And [www.Rishiculture.Org](http://www.Rishiculture.Org)
  30. <https://www.yogajournal.com/poses/net-bearer-bond>
  31. <http://www.yogicwayoflife.com/jalandhara-bandha-the-chin-lock/>
  32. Asana Pranayama Mudra Bandha” Swami Satyananda Saraswati Published by Bihar School of Yoga, First edition 1969 Reprinted 2008, 2009 ISBN: 978-81-86336-14-4 Publisher and distributor: Yoga Publications Trst, Ganga Darshan, Munger, Bihar, India. Website: [www.biharyoga.net](http://www.biharyoga.net) , [www.rikhiapeeth.net](http://www.rikhiapeeth.net))
  33. Asana Pranayama Mudra Bandha” Swami Satyananda Saraswati Published by Bihar School of Yoga, First edition 1969 Reprinted 2008, 2009 ISBN: 978-81-86336-14-4 Publisher and distributor: Yoga Publications Trst, Ganga Darshan, Munger, Bihar, India. Website: [www.biharyoga.net](http://www.biharyoga.net), [www.rikhiapeeth.net](http://www.rikhiapeeth.net))
  34. <https://www.yogajournal.com/poses/net-bearer-bond>
  35. Article on “An Investigation of Ayurvedic Principles in Dentistry and their use in Dental Extractions without Local Anaesthetic” by Rohin Butani in AESCULAPIUS - Summer 2010 journal of The University of Birmingham Medical and Dental Graduates Society published by The Sands Cox Society and The University of Birmingham Medical School, Birmingham B15 2TTISSN 1356-3610 Page no 68-72.
  36. Article on “Tooth extraction without anesthesia using ancient indian technique called jalandhara bandha yoga” Bhavik Jaysukhbhai Makhwana University of North Texas Health Science Center, Fort Worth, Texas, USA., NiravNavinchandra Arora Edith Cowan University, Perth, Australia published in *Journal of Advanced Medical and Dental Sciences Research* [Vol. 3|Issue 1| January-March 2015 page no 201-204.
  37. Article on “Painless Tooth Extraction by *JalandharaBandha Yoga*” by Vivek J, B A Venkatesh published in *Journal of Ayurveda and Integrated Medical Sciences* | Sep - Oct 2016 | Vol. 1 | Issue- 3 ISSN: 2456-3110 page no 113-116