

KAPĀLABHĀTI TECHNIQUES IN SELECTED CLASSICAL AND MODERN YOGA TEXTS – A REVISIT

SAHAY, G.S.*, BHOGAL, R.S.**

ABSTRACT

Kapālabhāti is one of the six cleansing processes described in Haṭhayoga. Since it is a breathing exercise, therefore, it has found its place also in the book describing Prāṇāyāmic exercises (See the book Prāṇāyāma by Swāmi Kuvalayānanda). One of the Kumbhaka viz. Bhastrikā has been described as combined practice of Kapālabhāti and Sūryabhedana and in a way, this kumbhaka also contains Kapālabhāti as its important component. In order to find the subtleties behind the various techniques of Kapālabhāti, the authors have scrutinized selected yoga texts and modern books and tried to present them analytically so that subtle differences in the various techniques of Kapālabhāti could be explicitly brought out towards their possible application.

Key words : *Kapālabhāti, cleansing process, Prāṇāyāma, Jyotsnā, Haṭhapradīpikā, Gheraṇḍasaṃhitā.*

Introduction

Kapālabhāti (henceforth *KB*) is one of the six cleansing processes (HP II/22) and an important practice in Haṭhayogic curriculum which involves respiration as major tool for the practice. Perhaps, recommended before the practice of *Prāṇāyāma* / *Kumbhaka*s, this is the only practice which has been given esteemed position from the view point of its wide range of application. It has also been described as a component of *Bhastrikā prāṇāyāma*. In modern times, we find it being recommended for various therapeutic purposes as well.

We find technique of this practice described in classical, as well as, modern Yoga Texts wherein we find points of differences amongst them. These differences have prompted the authors to take up the work on *KB* and to present, analytically, its various techniques as available in selected classical and modern Yoga Texts.

Materials and method

I. The following Yogic Texts have been selected under the group of Classical Texts:

* HOD, Yoga Mimamsa Department, Kaivalyadhama Ashrama, Lonavla.

** Principal, Gordhandas Seksaria College of Yoga and Cultural Synthesis, Kaivalyadhama, Lonavla

- A. *Yoga Sūtra* (YS)
 - B. *Haṭhapradīpikā* (HP)
 - C. *Gheraṇḍa Saṃhitā* (Gh.S.)
 - D. *Haṭharatnāvalī* (HR)
 - E. *Jyotsnā commentary on HP by Brahmānanda (HPJ)*
- II. Following Yoga Texts have been selected under the group of Modern Texts:
 - A, *Prāṇāyāma* by Swāmī Kuvalayānandaji
 - B. *Prāṇāyāma -The art and science* by Dr. H.R. Nagendra
 - III. The *Bhastrīkā Kumbhaka* which contains the practice of *KB* as its first part has also been taken into consideration while presenting *KB* technique from the above mentioned texts.
 - IV. The technique of *KB* has been analyzed, on the basis of *Sūtra* / Verses available in Classical texts, in relation to its description, meaning, discussion and observation.

Limitations of the study

- This study is delimited to a few available important books. A large scale project can be taken up to study almost all books on yoga- classical and modern.
- This study does not proclaim any technique to be right or wrong.
- Yoga authorities may select/reject some of the techniques depending on their own purpose.

0. *KB* – A General introduction

In *Haṭhayoga* Texts, we find *Śodhana Kriyā* or *Ṣaṭ Karma* described as important practice in its curriculum. These six cleansing practices are – *Dhauti*, *Basti*, *Neti*, *Trāṭaka*, *Nauli* and *Kapālabhāti*. Here, as a part of general introduction to the technique of *KB* technique, the following verse from *Haṭhapradīpikā* has been presented, as this very verse is usually quoted while introducing *KB* to the students:

***bhasrāvallohakārasya recapūrau sasambhramau/
kapālabhātīrvikhyātā kaphadoṣaviśoṣaṇī //***

The rapid performance of Exhalation and Inhalation imitating the bellows of a blacksmith is popular by the name *Kapālabhāti*. This has been further eulogised in the following manner by Swāmī Kuvalayānandaji in his book *Prāṇāyāma* (Page 90).

“Broadly speaking *KB* is a breathing exercise of the abdominal or diaphragmatic type in which sudden expulsion of breath and inhalation follow one another in quick succession. *Recaka* is the principal part of this practice, *pūraka* being only supplementary.”

This technique, as described by Swāmī Kuvalayānandaji is known as ‘practice of active exhalation and passive inhalation’. Exhalation is active because one has to make effort for sudden expulsion of breath through the nostrils. Inhalation is passive because nothing is done for taking the air in. Air automatically rushes in simply because of going down of diaphragm with the relaxation of abdominal muscles. This technique, i.e. going down of diaphragm and relaxation of abdominal muscles, results into inhalation.

Now, we shall make an effort to study the techniques of *KB* as found in various yoga texts. Let us present and examine the techniques of *KB* from each of the books mentioned under materials and method above.

I. FROM CLASSICAL TEXTS

I.A. *YOGA SŪTRA* –

In *Yoga Sūtra* we find two places where respiratory practices have been referred. One in the context of *Cittaprasādana* and the other in the context of 4th limb of *Aṣṭāṅga Yoga* – i.e. *prāṇāyāma*. Here, we are concerned with the respiratory technique mentioned in the context of *Cittaprasādana* since this seems to have a similarity with the practice of *Kapālabhāti*. The *Sūtra* of *Patañjali* reads as under-

pracchardanavidhāraṇābhyāṃ vā prāṇasya (PYS I/34)

In order to understand the technique presented in this *Sūtra*, it is necessary to understand the following three important words of this *Sūtra* -

- *pracchardana*
- *vidhāraṇa* and
- *Prāṇa*.

All these three words are used by the Sage *Patañjali* for presenting one process. We shall try to analyze all these three words.

- *Pracchardana*- *pra* + *cchardana*- ‘*pra*’ as prefix here stands for ‘*prakarṣeṇa*’, which means - with intensity. *cchardana* – means vomiting or expelling out suddenly or intensely. So *pracchardana* will mean expelling out with intensity.

- *Vidhāraṇa* – Here ‘Vi’ has been used as prefix for *Dhāraṇa* –to mean a particular retention. This retention can mean retaining in or retaining out. a. Here, it should mean ‘retaining out in special way as it is to be done soon after ‘expelling out with intensity’. b. However, ‘*dhāraṇa*’ also means ‘putting on’ but in this context it will also mean ‘taking in’ and thus the ‘*vidhāraṇa*’ will mean ‘taking in’ in a special way
- *Prāṇa* – the word is usually understood as life force. The life and its continuation depend upon respiration, so *prāṇa* also represents respiration or even air.

If the three words in the *sūtra* are understood in the manner explained above, the composite meaning of the *sūtra* can be worked out as-

- Expelling out the air with intensity followed by – (a) retaining the air out in special way or (b) taking the air ‘in’ in a special way
- While discussing on this *sūtra*, Dr. P.V. Karambelkar, in his commentary (PYS I/34 pg 105), has ruled out the possibility of ‘retaining in’ or ‘retaining out’ as it would involve ‘*kumbhaka*’ and ‘*kumbhaka*’ at this initial stage of practice is not at all advisable. More over, if ‘*vidhāraṇa*’ means ‘retaining out in special way’, then the practice instruction will be said to be incomplete as after expulsion of air and retaining the air out, no instruction is available for mode of inhalation in *sūtra*. Thus, retention of air either in or out is not acceptable. We may consider the meaning ‘b’ above as valid one which says ‘Expelling out the air with intensity followed by taking the air ‘in’ in special way.

If we analyse the *Yoga Sūtra* I/34 from this view point of technique, we find the following points as strikingly similar to that of KB, mentioned in its General Introduction.

- Expulsion of air (through nostrils) with intensity. This is very similar to that of ‘Expulsion of air in KB’.
- Taking the air in special way can be equated with inhalation part of KB, where again inhalation is done in a special way.

I.A.1. Discussion and observations

- Technique mentioned in PYS I/34 in the context of *Cittaprasādana* seems to be very much similar to that of (popular) KB.
- *Patañjali* has not given any specific name to this practice.
- To certain extent, the element of purification is indicated in PYS I/34 as this technique is meant explicitly for *Cittaprasādana*.

- This *sūtra* can be said to be the first mention of KB type technique without any nomenclature to it.

I. B. HAṬHAPRADĪPIKĀ (HP)

In the sequence of the texts under study, *Haṭhapradīpikā* is second and first among all the available published *Haṭhayoga* Texts. It happens to be the oldest among the books, after PYS selected for the study.

Most of the Yoga Sādhakas/practitioners and experts of *KB* often quote the verse available in HP on KB mentioned earlier viz. H.P. II/12 in the context of general introduction to KB.

I.B.1. Discussion

- In order to understand the technique, we must try to understand the application of the simile of bellows to the technique of *kapālabhāti*, to the extent.
- Bellows are used to intensify the fire in the furnace for various purposes of the blacksmith. This is possible only if intensified air blow is given to the furnace. This is acquired by pushing the bellows downward. In the whole process, blowing of the air is active and important. So far the entry of air in the bellows is concerned, the same happens simply by lifting the bellows upward.
- Somewhat similar action is imitated while practicing *kapālabhāti*. For the sake of forceful exhalation, the abdomen is drawn in just as bellows are pushed down to blow the air intensely. Inhalation, being a passive action, mere relaxation of abdomen facilitates the air to rush in. This action may be equated with pulling up of bellows.
- The word ‘*sasambhramau*’ in the verse is the root cause of dispute in the practice of *kapālabhāti*. *sa* = with and *sambhramau* = rapidly. This rapidity of exhalation and inhalation can be acquired in the manner discussed above.
- However, there is yet another possibility of interpretation of the word ‘*sasambhramau*’. According to the other interpretation both Exhalation and Inhalation should be rapid and active.

I. B. 2. Observation

- Technique of KB as available in HP is not very clear and therefore, it is liable to be interpreted in two different ways.
- Though popular technique of KB is active exhalation and passive inhalation but possibility of practicing it with both the aspects to be active, can not be ruled out.

- That is why we find in some traditions the other technique being promoted.

I. C. *GHERAṆḌA SAṂHITĀ* (GH.S)

Gheraṇḍa Saṁhitā has presented cleansing processes into six main varieties along with their various subclassifications. Here, we find the use of the word ‘*Bhālabhāti*’ along with *Kapālabhāti*. Since ‘*Bhāla*’ and ‘*Kapāla*’ both indicate the same area of the body hence we can consider ‘*Bhālabhāti*’ as another name of ‘*Kapālabhāti*’.

This text presents three varieties of *KB* / *Bhālabhāti*. They are –

1. *Vātakrama bhālabhāti*
2. *Vyutkrama bhālabhāti* and
3. *Sītkrama bhālabhāti*

We shall try to understand the technique of all the three varieties one by one.

I. C. 1. *Vātakrama bhālabhāti* –

The technique of this *bhālabhāti* has been described as under –

iḍayā pūravedvāyuṃ recayetpiṅgalayā punaḥ /
piṅgalayā pūrayitvā punaścandreṇa recayet //
pūrakam recakam kṛtvā vegena na tu dhārayet // Gh. S. I/55,56

Meaning – Inhale through left nostril and exhale through the right and again inhaling through the right exhale through the left nostril. This inhalation and exhalation should be done rapidly without retaining the air.

I. C.1.a Discussion

- In his method nostril is used alternately for inhalation and exhalation.
- Both inhalation and exhalation are active.
- Both are required to be done with equal force and rapidity.
- Verse clearly mentions that at no point retention is to be applied.

I. C.1.b. Observations-

- Concept of passive inhalation is absent here.
- So far, use of alternate nostril for inhalation and exhalation reminds the ‘*Nāḍīśodhana Prāṇāyāma*’ as described in HP (II/10). However, no other aspect of *Nāḍīśodhana prāṇāyāma* is common with it such as ratio, retention etc.

- Inhalation and exhalation both being fast and forceful - is a new feature in it.
- Thus, a very different technique of *Bhālabhāti* / *KB* has been presented by Gh.S.

I. C.2. *Vyutkrama bhālabhāti* –

This is the second variety of *Bhālabhāti* or *Kapālabhāti*. (*Vyutkrama* means opposite of the normal sequence/method). It has been described in the following manner –

*nāsābhyāṃ jalamākṛṣya punarvaktreṇa recayet /
pāyaṃ pāyaṃ vyutkrameṇa śleṣmadoṣaṃ nivārayet // I/57//*

Meaning – Drawing the water in through the nostrils and expel it through the mouth. It is done repeatedly. This is known as *Vyutkrama bhālabhāti*.

I. C.2.a Discussion –

- This practice has nothing to do with air/respiration.
- It is called ‘*Vyutkrama*’ which means opposite of the normal sequence/method.
- Normally water is drunk through mouth, here it is to be drunk through nostrils therefore *vyutkrama*.
- Water is to be taken out through the mouth only.

I.C.2.b. Observation–

- It is entirely a different practice (*Bhālabhāti*) but it is also a *Kapālabhāti*.
- Water is used for this *KB* (*Bhālabhāti*).

I.C.3. *sītkrama Bhālabhāti* –

This is the third variety of *Kapālabhāti*/ *Bhālabhāti* according to Gheraṇḍa Saṃhitā. Its technique has been described in the following manner –

*sītkṛtya pītvā vaktreṇa nāsānālairvirecayet /
evemabhyāsayogena kāmadevasamo bhavet //I/58//*

Meaning – Drink with *sīt* sound through the mouth and expel out through the nostrils. This practice makes one handsome like a cupid.

I.C.3.a. Discussion –

- The verse does not make it clear regarding the object to be drunk – air or water ?

- Editors of *Gheraṇḍa Saṃhitā* (Cr. Ed.) pub. by Kaivalyadhama, (Ed. By Swami Digambari and M.L. Gharote) while translating this verse has super imposed the word ‘water’ and translated it as ‘sucking water....’
- But in the same edition – in the note part on this verse writes – ‘since there is no mention of ‘jala’, the process may involve taking air through mouth and expelling it through nostrils....’. If we consider ‘air’ for this practice, then it will be a type of *sītkārī* (HP II/ 54) without any aspect of Kumbhaka.

I.C.3.b. Observations –

- Though the word ‘water’ is super imposed in the translation of this verse of Gh. S. published by Kaivalyadhama, but it seems appropriate because
 - logically after *vyutkrama bhālabhāti* (taking water in through nostril and taking out through month) the *sītkrama* should be the practice in which the water is taken in through the mouth and expelled out through the nose.
- These two practices done one after another repeatedly resembles the practice known as *Mātaṅginī Mudrā* described in Gh. S (III/67, 68)
- However, it is difficult to justify as to, why *Gheraṇḍa* considers last two practices to be the variety of *kapālabhāti*, specially when he himself has described *Mātaṅginī Mudrā* in the IIIrd chapter with such a striking similarity.
- If *sītkrama bhālabhāti* is to be practiced with air inhaling through mouth and exhaling through nose – does not have any specific peculiarity in comparison to *sītkārī kumbhaka*, except that here is no concept of ratio between inhalation and exhalation and so also no kumbhaka in it.
- But, in any case, this third variety of *Bhālabhāti/Kapālabhāti*, either practiced through water or air, will be called *Bhālabhāti/Kapālabhāti*. For this reason the same has been considered here.

I. D. HAṬHARATNĀVALĪ (HR)

This text on Haṭhayoga named *Haṭharatnāvalī* (HR) was written by *Śrīnivāsa* *bhaṭṭa*. We find two techniques of *KB* described in *Haṭharatnāvalī*.

I.D.1 The first variety is exactly similar to that of *KB* described in *Haṭhapradīpikā* (Pl. refer 0.).

I.D.2 The second techniques is being described in the following way in HR –

kapālaṃ bhrāmayet savyamapasvyaṃ tu vegataḥ /
recapūrvakamuktena kapālabhrāntimucyate // HR I/55//

Meaning – one has to rotate the head fastly from left to right and right to left during the exhalation and inhalation as described in the first variety. This is known as *Kapālabhrānti*.

I.D.2,a Discussion –

- We find its name changed as *Kapālabhrānti*.
- Though it talks of two techniques, technique 1 is exactly similar to the technique found in *Haṭhapradīpikā*.
- In the second variety the rotation of head is an added feature.

I.D.2.b. Observation –

- a. *Kapālabhrānti* is new name given to this practice.
- b. Rotation of head is also a new feature added to it.

I. E. HAṬHAPRADĪPIKĀ AND JYOTSNĀ COMMENTARY BY BRAHMĀNANDA (HPJ) ON HAṬHAPRADĪPIKĀ IN THE CONTEXT OF BHASTRIKĀ KUMBHAKA

Here, we have again considered *Haṭhapradīpikā* and also *Haṭhapradīpikā Jyotsnā* for the purpose of finding *KB* technique. This is mainly based on two reasons –

- Wherever *Bhastrikā prāṇāyāma* is introduced or practiced, it is usually said, ‘it is a combination of *KB* and *sūryabhedana kumbhaka*’. Since popularly *KB* is considered as essential component of *Bhastrikā kumbhaka*, it is being considered here.
- In the context of *Bhastrikā*, while describing its first part, ‘*svātmārāma*’, has reproduced almost the similar verse of *kapālabhāti*. However, he has added some special features to it. We shall present these features in our study here.

I.E.1. The first part of *Bhastrikā kumbhaka* has been described in *Haṭhapradīpikā* in following verses –

*mukhaṃ saṃyamyā yatnena prāṇaṃ ghrāṇena recayet /2/60/
yathā lagati hr̥kaṇṭhe kapālavadhī sasvanam/
vegena pūrayeccāpi hr̥tpadmāvadhi mārutam//
punarvirecayettadvat pūrayecca punaḥ punaḥ / 2/62//*

Meaning – Closing the mouth, one should effort fully exhale with sound through nostrils so as to touch of the air taken in is felt at the heart, throat and up to the skull. One should inhale fastly to the extent of lotus of the heart region only. It should be performed repeatedly.

I.E.1.a. Discussion

- Instruction mentions ‘effortfully exhale with sound’.
- While exhaling the tactile experience of the air is to be felt at heart, throat and skull.
- Inhalation is to be done ‘*vegana*’ which means here ‘immediately and fastly’.
- Air is to be taken in only up to heart region.
- This process should be repeated again and again.

I.E.1.b, Observations

- Production of sound during forceful exhalation is an additional instruction.
- Sensation of air to be felt during exhalation is yet another added instruction.
- Instruction about Inhalation up to the heart is absent from the technique of *KB* as cleansing process in HP itself.
- Production of sound and sensation of air:
 - How to produce the sound is not made clear in the Text.
 - We may follow the same technique of producing sound as in *Ujjāyī* following a partial closure of the glottis.
 - This partial closure of glottis will create a very mild resistance in the exhalation.
 - Because of this resistance, the sensation of air can be felt at the heart, throat and up to the skull.
- Inhalation up to the heart
 - In usual *KB* we do not find this instruction, as there we have to relax the abdomen and allow the diaphragm to come down resulting into rushing of the air passively to the abdomen. (See *KB*– A general introduction).
 - But, here the air is not allowed to go beyond heart region.
 - This also suggests that movement in the chest is permissible and there should not be any major movement in the abdomen.

I.E.1.c Analysis

- We must not forget that here *KB* type practice has been given as a part of the practice of *Bhastrikā kumbhaka*. Thus, strict textual instruction for the practice of any kumbhaka is applied here also.

- According to HP. II/47, before one starts taking the prāṇa (air) in below the throat, he is advised to raise the *apāna vāyu* upward. This raising of the *apānavāyu* is achieved by way of *Mūlabandha* that is to be maintained for the whole session of *Kumbhaka*.
- This general instruction becomes applicable to all the *Kumbhakas* and therefore, this is true for first part of *Bhastrikā* also, known popularly as *Kapālabhāti*.
- If *Mūlabandha* precedes *Kapālabhāti*, then because of the body mechanism involved in *Mūlabandha*, abdominal movement is compulsorily restricted and hence it is thorax which remains active in a major way.
- Perhaps, this is the reason why in the context of *Bhastrikā* the first part, popularly known as *Kapālabhāti*, *Svātmārāma* has specifically mentioned about the sensation of air to be felt at the heart, throat and skull during the forceful exhalation and during inhalation, not allowing the air to go beyond/below heart.
- Partial closure of glottis not only will help in production of the sound during forceful exhalation but also will give a sensation of touch of the air at the heart, the throat and the skull. During inhalation, it will also play an important role in restricting the inhaled air to the heart region only, though physiologically, the air inhaled goes to the lungs in the heart region and not to the abdomen during inhalation.

I.E.2. EXEGESIS BY BRAHMĀNANDA IN JYOTSNĀ COMMENTARY ON VERSES RELATED TO BHASTRIKĀ IN HP

We find a Sanskrit commentary on *Haṭhapradīpikā* of *Svātmārāma*. The name of the commentary is ‘*Jyotsnā*’ and it has been written by *Brahmānanda* during early part of 19th century. While commenting on verses related to *Bhastrikā Kumbhaka* (*BH.K.*), the commentator mentions two traditions of its practice, may be being practiced during his time. Both the techniques again are divided into two parts. The first part of both the techniques of *Bhastrikā Kumbhaka* is a type of *KB* practice. Here, for the purpose of this article, only this first part of *Bhastrikā Prāṇāyāma* has been considered for discussion.

I.E.2.a TRADITION 1. BH.K. IST PART ACCORDING TO JYOTSNĀ

Technique (as in *Jyotsnā*)

vāmanāsikāpuṭaṃ dakṣiṇānāmikā kaniṣṭhikābhyāṃ nirudhya dakṣiṇanāsikāpuṭena bhasrāvadvegena recakapūrakāḥ kāryaḥ | Śramejate...| punaḥ dakṣiṇanāsāpuṭamaṅguṣṭhena nirudhya vāmanāsikāpuṭena bhasrāvajjhaṭīti recaka pūrakāḥ – kartavyāḥ | (HPJ II/65)

Meaning – Closing the left nostril with the help of ring and little finger of right hand, one

should exhale and inhale through the right nostril fastly imitating the bellows (of a blacksmith) till the fatigue sets in . Again closing the right nostril with the help of thumb (of right hand), one should exhale and inhale through the left nostril fastly imitating the bellows (of blacksmith).

I. E.2.a.i. Discussion

- Only one nostril has been used for fast exhalation and inhalation keeping the other nostril closed.
- This practice is to be done from each nostril till the fatigue sets in.

I.E.2.a.ii Observation

- Other additional instructions found in the verses of *Svātmārāma* have not been mentioned here by *Brahmānanda* but it can be presumed that all other conditions will also be applicable here.
- Though technically not permissible / correct, this practice can be done without those additional instructions also, as they are not mentioned here.
- The first part of the first technique can also be divided into two separate practices i.e. inhalation and exhalation from right nostril making one practice and similarly from left nostril making another practice. However, this is just a logical presumption. No such indication is there in the description of technique.

I.E.2.b TECHNIQUE – 2 BH.K. IST PART ACCORDING TO *JYOTSNĀ*

Technique – (as in *Jyotsnā*)

*vāmanāsikāpuṭamanāmikākaniṣṭhikābhyāṃ nirudhya dakṣiṇa nāsikāpuṭena
pūrakam kṛtvā jhaṭityaṅguṣṭhena dakṣiṇa nāsikāpuṭam nirudhya
vāmanāsāpuṭena recayet. evaṃ śatadhā kṛtvā śramejāte..... |
punardakṣiṇanāsāpuṭamaṅguṣṭhena nirudhya vāmanāsāpuṭena pūrakam
kṛtvā jhaṭiti vāmanāsikāpuṭamanāmikā kaniṣṭhikābhyāṃ nirudhya
piṅgalayā recayedbhasrāvat | punaḥ punarevaṃ recakapūrakāvṛttiśramejāte.... |*

Meaning- Closing the left nostril with the help of ring and little finger, inhale through the right nostril and then immediately closing the right with the thumb, exhale through the left nostril. One should do this for hundred times or till fatigue sets in. Again closing the right nostril with the thumb, inhale through the left nostril and then immediately closing the left nostril with the help of ring and little finger, exhale through the right nostril imitating the bellows (of blacksmith). The inhalation and exhalation should be performed again and again till the fatigue sets in.

I.E.2.b.i. Discussion

- Here again, the mention of additional instruction is missing which we find in the verses of *Svātmārāma*.
- Important point to remember here is that one of the nostrils is used for inhalation and other one is used for exhalation.
- This is to be done in a quick succession.
- For every exhalation and inhalation one has to imitate the bellows of a blacksmith.
- The ideal dose, prescribed for this type of practice, is 100 times. However, one can stop earlier also if the fatigue is felt.

I.E.2.b.ii Observations

- Though, the additional instructions are missing, however, it can be presumed that all other conditions mentioned in the verses are also applicable here.
- However, because of the non explicit mention of such conditions, the practice can be taken up without the application of other additional instructions.
- KB type practice according to this instruction can be undertaken in two ways
- Inhalation from right and exhalation from left to be done for hundred time or till the fatigue sets in followed by inhalation from left and exhalation from right for hundred times or till the fatigue sets in, this can be done in one single sitting.
- The above practice can also be divided into two different practices and the practitioner can resort to any one type of inhalation and exhalation depending upon one's requirement.

II. FROM MODERN TEXTS

KB is being practiced by yoga practitioners and to certain extent is most popular breathing exercise considered as preparatory exercise for *Prāṇāyāma*. All modern schools of yoga have tried to explain the technique of *KB* more elaborately in order to reap maximum benefit out of it, may be physiological, therapeutical or spiritual. Here in this article we have considered only two modern Texts. They are – A. 'Prāṇāyāma' by Swāmī Kuvalayānandaji and , B. 'Prāṇāyāma - The art and science' by Dr. H. R. Nagendra.

Introduction to these two Texts

- A. 'Prāṇāyāma' by Swāmī Kuvalayānandaji has been published by Kaivalyadhama Yoga Institute, Swami Kuvalāyanandaji, the pioneer of scientific research in Yoga and very strong propagator of scientific method for the practice of Yoga, had established

Kaivalyadhama Yoga Institute in the year 1924. *KB* technique has been described in this book and presentation of its technique here has been drawn from this very book.

- B. ‘*Prāṇāyāma – the Art and Science*’ is authored by Dr. H. R. Nagendra who is the founder Director of SVYAS Institute at Bangaluru. The institute is working a lot for the promotion of Yoga therapy. The Institute conducts various Yoga therapy courses under the able guidance of Dr. H.R. Nagendra. Dr. Nagendra in his book on *Prāṇāyāma* has described various types of *Kapālabhāti*. We shall discuss these techniques of *KB* as presented by him in his book.

II. A TECHNIQUE OF KAPĀLABHĀTI FROM SWĀMĪ KUALAYĀNANDAJI’S BOOK PRĀṆĀYĀMA

II.A.I. The *KB* technique has been described by Swāmīji from Page 83 to 105 of the Book *Prāṇāyāma* (Chapter V). The main technique of *KB* described in this book is as under –

- *KB* is a breathing exercise of diaphragmatic or abdominal type.
- In this exercise exhalation is effected by the movements of front abdominal muscles and diaphragm. Air is to be exhaled, as can be driven out of lungs, by a sudden and vigorous inward stroke of the front abdominal muscles.
- The muscles that act on and between the ribs are kept contracted and raised for the whole session of *Kapālabhāti*.
- The muscles that freely move throughout exercise, undergoing alternate constriction and relaxation, are that of the diaphragm and the front abdomen.
- In *Pūraka* (Inhalation) one has to simply relax the abdominal muscle, the *relaxation* being a passive act.
- Muscles acting on and between the ribs, once contracted remain in the same condition.
- However, during the exhalation ribs sink but this falling of ribs is almost negligibly insignificant.

II.A.1.a. Observation

- Here, the technique has been presented with the help of actual anatomical description as to how to exhale and inhale.
- The position of the body parts play important role in it.
- Diaphragmatic or abdominal breathing has been given importance here.
- Anatomico physiologically the technique has been explained to make it clear as to what one has to do in *Kapālabhāti*.

II.A.1.b. Discussion

- Active exhalation and passive inhalation has been mentioned here.
- Contraction of ribs and little raised condition during exhalation and inhalation both essentially gives the desired movement to the whole of the front abdominal muscles.
- This is a scientific explanation of the technique.

II.A.2 TECHNIQUE OF IST PART OF BH. K. KNOWN AS *KAPĀLABHĀTI*

Swāmīji, in Chapter VI of his book ‘*Prāṇāyāma*’, has described four varieties of Bh.K.. The first part of each variety of Bh.K. has been invariably termed *Kapālabhāti*. Therefore, all the varieties of *KB* are presented here for consideration.

II.A.2.a *KB* of first variety of Bh.k. –

This variety of *KB* of Bh.k. is based on the technique as available in *Gheraṇḍa Saṃhitā* -V/70

“In this variety the Ist part is completely identical with that of *KB* as described just above.”

Thus, no special observation or discussion is necessary or possible here as Swāmīji himself considers it exactly identical to that of II.A.1

II.A.2.b *KB* of second variety of Bh.k. –

Swāmīji has presented its technique as under –

- This also corresponds to *KB* (II.A.1)
- However, here glottis is to be slightly contracted so that a frictional sound is produced while breath is expelled out or taken in.
- Slight contraction of the glottis once secured is to be maintained throughout this part of the exercise.
- This contraction should not create any substantial obstruction to the passage of air while expelling it out or taking in.
- Rest of the technique is completely identical with *KB* (II.A.1).

II.A.2.b.i Discussion –

- This technique has been presented in accordance with the technique as presented in Ist part of Bh.K. by *Svātmārāma* in HP.
- It seems that in order to produce the sound, the contraction of the glottis has been suggested.
- Contraction is to be maintained during both active exhalation and passive inhalation.

II.A.2.b.ii Observation

- This *KB* has been instructed to practice with contracted glottis.
- Rest of all other instructions are quite similar.

II.A.3. *KB* of third variety of Bh.K. –

The third variety of Bh.k. is actually the 1st tradition of Bh.K. (I.F.2.a) available in *Jyotsnā*. In this *Kapālabhāti*, excepting the inhalation and exhalation, which is to be done from the same nostril, rest of the instructions are exactly similar to that of *KB* of second variety of **Bhastrikā Kumbhaka**. *KB* type breathing is to be done from each nostril till the fatigue sets in.

II.A.3.a. Observations

Important difference that lies in the fact that usually both the nostrils are used for exhalation and inhalation but in this variety of *KB* only one nostril is used for exhalation and inhalation both.

II.A.4. *KB* in fourth variety of Bh. K.-

The fourth variety of **Bhastrikā Kumbhaka** described by Swāmīji in the Book ‘*Prāṇāyāma*’ is based on 2nd tradition of **Bhastrikā Kumbhaka** presented by *Brahmānanda* in *Jyotsnā*, a Sanskrit commentary on *Haṭhapradīpikā* and presented here under I.E.2.b.

According to *Swāmīji*, all the features of *KB* second variety are applied here excepting the mode of exhalation and inhalation.

In this variety, while doing the first part known as *Kapālabhāti*, one has to inhale from one nostril and exhale from the other till the fatigue sets in. The active nostril is to be kept opened whereas the other nostril is to be kept closed.

All other aspects of *KB* are invariably applied here –

- Ribs contracted and raised.
- Partial closure of glottis is maintained.
- Sound is to be produced.
- Rapidity in inhalation and exhalation is common again.

II.A.4.a. Discussion -

- The *KB* in second, third and fourth variety of **Bhastrikā Kumbhaka** differ mainly in respect of mode of exhalation and inhalation. In all the three varieties we find different modes of inspiration and expiration.

II.A.4.b. Observations –

- The fourth variety of KB reminds the mode of inhalation and exhalation found in *Vātakrama Bhālabhāti* of Gheraṇḍa Saṃhitā (I.C.1). In *Vātakrama Bhālabhāti* also alternate nostril is used for inhalation and exhalation.
- Rapidity is common factor in both the *Kapālabhāti*.
- Alternate breathing is done in quick succession in *Vātakrama Bhālabhāti*
RN (Inhalation) → LN (Exhalation) → LN (Inhalation) → RN (Exhalation) and this is to be done for several times.
- The observation made in the context of I.E.2.a.ii. is applicable here.

II.B.O Prāṇāyāma- The art and Science , SVYASA, Bangaluru

The book ‘Prāṇāyāma- The art and Science’ by Dr. H.R. Nagendra contains a chapter on Kapālabhāti. The total techniques of KB available in this book are five. They have been named as –

1. Kapālabhāti
2. Candrānuloma – Viloma Kapālabhāti
3. Sūryānuloma – Viloma Kapālabhāti
4. Candrabhedana Kapālabhāti
5. Sūryabhedana Kapālabhāti

II.B.1 The technique of KB has been presented in following way:

Inhale through left (keeping the right nostril closed)



(Close the left and open the right) Exhale with a burst through right Inhale through right (Keeping the left nostril closed)



(Close the right and open the left) Exhale with a burst through left.

II.B.1.a Observations –

- This is alternate nostril breathing in the form of Kapālabhāti.
- Exhalation is to be made from ‘alternate nostril’.
- It is to be done in an active way and air is to be thrown out with burst.

II.B.1.b Discussion

- This KB is quite similar to that of ‘Vātakrama Bhālabhāti’ available as one of the three

varieties of Bhālabhāti excepting that here inhalation is not fast.

II.B.2 Candranuloma – viloma KB

- Closing the right inhale through the left
↓
Exhale vigorously through the left
↓
Inhale passively through the left
↓
Again exhale vigorously through left
- This process is to be repeated with a speed up to 120 strokes per minute.

II.B.2.a Observations

- Only one nostril has been used for this Kapālabhāti.
- The left nostril is associated with moon, perhaps, therefore it has been named Candrānuloma – viloma Kapālabhāti.

II.B.2.b Discussion

- The technique presented here seems to be taken from the first part of Tradition 1 of Bhastrīkā described by Brahmānanda commentator on Haṭhapradīpikā.
- It has been named ‘Anuloma-viloma’. In the yogic literature, this word is translated as ‘Alternate’. Contextually it denotes – inhalation from one nostril and exhalation from other nostril – as we find in ‘Nāḍīśodhana Prāṇāyāma’.
- Here only one nostril (Left) is used both for passive inhalation and vigorous exhalation.
- Hence ‘Candrānuloma – viloma’ nomenclature does not seem proper.

II.B.3 Suryānuloma viloma KB

- Inhale through the right nostril
↓
Exhale vigorously through the right
↓
Inhale passively through the right
↓

Exhale vigorously through the right

- This process is to be repeated with a speed up to 120 Strokes Per Minute.

II.B.3.a Discussion

- Broadly as in the context of Candranuloma viloma with only a difference that here sūrya should be read in place of candra and right should be read in place of left.

II.B.3.b Observations

Same as in the context of Candrānuloma viloma Kapalabhati (II.B.2.b)

II.B.4 Candrabhedana KB–

The technique has been presented in the following names -

- Close the right nostril inhale full through the left nostril.



Close the left nostril and open the right and exhale through the right with a burst.



Again closing the right with an ‘automatic inhalation’ through the left.



Close the left and open the right and exhale through right nostril with a burst.

- Repeat with a speed upto 120 strokes per minute.

II.B.4.a Discussion

- Candrabhedana, as the name itself suggests (as against Sūryabhedana), one has to inhale through left and exhale through right.
- Since it is Kapālabhāti, here exhalation part is to be done forcefully.
- Since it is not Kumbhaka – no question of ratio or Bandha.

II.B.4.b Observation

- This technique of KB seems to be taken from the first part of the Tradition 2 of Bhastrikā K. described by Brahmānanda commentator on Haṭhapradīpikā.

II.B.5 Sūryabhedana KB–

The technique has been presented in the following manner –

The whole process of Candrabhedana KB is reversed in this Kapālabhāti

II.B.5.a Discussion

- As in Candrabhedana Kapālabhāti

II.B.5.b Observation

This technique of KB seems to be taken from the first part of tradition 2 of Bhastrikā K. described by Brahmānanda commentator on Hathapradipika.

III. Overall observation

- a. The technique that we find in Pātañjala Yoga Sūtra, in the context of cittaprasādāna related with respiratory exercise, can be said to be the first mention of KB type technique without any specific nomenclature.
- b. KB– being respiratory exercise has been given importance in Haṭhayoga curriculum, mostly as independent cleansing process.
- c. Bhastrikā K. is a combination of two practices or we can say Bhastrikā K has two parts. The Yoga authors prefer to call the first part of the practice – by the name Kapālabhāti.
- d. If we include both types of Kapālabhāti. (PYS cleansing process and the first part of Bhastrikā K.), we find in all 20 types of KB described in the yoga texts and books under study here.
- e. Broadly speaking one thing is common in them that all the authors have unanimously prescribed forceful exhalation.
- f. In most of the techniques we find passive inhalation.
- g. Production of sound is also additional feature which has been prescribed by one text and also by Swami Kuvalayānandaji.

IV. OVERALL CONCLUSION

- a. We can say that Patañjali was the first to mention an exercise involving breathing which is very similar to that of Kapālabhāti.
- b. Use of nostrils for various modes of breathing have been prescribed for Kapālabhāti. They are –
 - a. Exhaling from both nostrils and Inhaling from both nostrils.
 - b. Exhaling from one nostril and inhaling from other nostril (This makes two types of Kapālabhāti)
 - c. Exhaling and inhaling from the same nostril (This also provides the possibility of two types of Kapālabhāti)
- c. Various modes of exhalation and inhalation have also been suggested. They are –
 - i. Forceful exhalation and passive inhalation

- ii. Forceful inhalation and forceful exhalation
- iii. Forceful exhalation with manipulation of body part and passive inhalation.
- d. We find also various names of kapālabhāti, specially in the book by Dr. H.R. Nagendra, which seems to be influenced from two of the varieties of Prāṇāyāma viz. Anuloma-viloma and Sūryabhedana .
- e. KB being only cleansing technique, does not involve any type of retention of breath.
- f. Even as first part of Bhastrika Pranayama, we find the description of the breathing exercise strikingly similar to that of Kapālabhāti, neither Svātmārāma, nor Brahmānanda have preferred to name it Kapālabhāti. They have simply mentioned ‘bhasrāvat’ i.e imitating a bellows.
- g. Swami Kuvalayānandaji has preferred to call it Kapālabhāti.
- h. So far the effects of each of these varieties of KB described above are concerned , they are yet to be established through scientific investigations.
- i. Under the given limitations of the study it is concluded that KB is a cleansing process of a paramount physiological and spiritual significance that can be tapped with advantage in a variety of its techniques depending upon one’s requirements and prerogative of yoga experts.
- j. Controlled scientific studies investigating into the efficacy of the variety of KB techniques would further provide a scientific credence to these techniques. As well, it may help evolve KB as a yogic practice for posterity.

ACKNOWLEDGEMENT

Authors express their grateful thanks to the Director of Research Swami Maheshanandaji for giving blessings and enlightening suggestions in the course of writing this article. Thanks are also due to Shri O. P. Tiwari, Secretary, Kaivalyadhama S. M. Y. M. Samiti and Shri Subodh Tiwari, Joint Director of Administration, for taking interest in this work. Authors also extend their heartfelt thanks to the staff members of SRD and PLRD for the encouragement for this work

References:

1. Digambaraji, Swami and kokaje, Pt. Raghunath Shastri, (Editors) (1998), Hathapradipika (Svatmarama), 2nd Edition, , Lonavala, Kaivalyadhama S.M.Y.M. Samiti.

KAPĀLABHĀTĪ TECHNIQUES IN SELECTED CLASSICAL
AND MODERN YOGA TEXTS – A REVISIT

2. Digambaraji, Swami and Gharote, M.L.,(Editors) (1998), *Gherandasamhita* (Gheranda), 2nd Edition, , Lonavala, Kaivalyadhama S.M.Y.M. Samiti.
3. Kuvalayanandaji, Swami, *Pranayama* (11th Ed.) (2010), Lonavala, Kaivalyadhama S.M.Y.M.Samiti.
4. Reddy, M. Venkata,(Editor) (2011), *Hatharatnavali* (Srinivasabhata), 2nd Edition, A.P., MSR Memorial Yoga Series.
5. Nagendra, H.R., (2005), *Pranayama- the art and science*,(3rd Ed.), Bangalore, Swami Vivekananda Yoga Prakashana.
6. Maheshanandaji, Swami. *et al.*, (Editors), (2002), *Hathapradipika Jyotsna* (Brahmananda) with Hindi Translation, (1st Ed.), Lonavala, Kaivalyadhama S. M. Y. M. Samiti,
7. Karambelkar Dr. P.V., (Commentator), *Patanjala Yoga Sūtra*, First reprint, (2002), Lonavla, Kaivalyadhama S. M. Y. M. Samiti