

# KAPAALA BHAATI

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Having described some important groups of asanas as Padmasanam, Sarvanganam, Trikonasanam, etc., it is perhaps time (though a few more useful and well known asana groups are to be dealt with) to take up the next step in Yoga, i.e., Pranayamam. Patanjali places it next to Asana, but authors of Hathayoga even as they follow the same procedure, suggest some purificatory acts at the physical level, before the Kumbhaka or breath holding Pranayamas are taken up. Six such acts, known as Shat Kriyas are mentioned by Svastmarama in Hatha Yoga Pradeepika. These are not obligatory exercises, even according to Hathayogis, but are suggested to those who are obese and phlegmatic and not for others for whom Vata, Pitha and Kapha are perfectly balanced.

Medha Sleshma Adhikaha Purvam  
Shat Karmani Samaachareth.  
Anyashtu Naachareth Taani  
Doshasansam Sama Bhaavathaha.

Those six acts are Dhouti, Vasti, Neti, Traatakam, Nauli and Kapaalabhati. Of these the first three, wherein use of water, cloth or other external agencies are used are not recommended nor encouraged in the system I have undergone. Traataka which is good as an exercise for the eyes, Nauli for the lower abdomen and Kapaalabhati, primarily for the respiratory system are however frequently used by many abhyasis all of which do not introduce external aids into the system and are not displeasing, as the first three kriyas.

Of these again, Kapaalabhati is most beneficial in preparing one for Pranayama to purify the Pranamayakosa.

Kapaalabhati is made up of two words - kapaala meaning skull and implying the entire head and bhathi, that which makes it shine. Thus one who practices kapalabhati finds a rejuvenating feeling in the head and gradually finds his face attaining some lustre. These cleansing activities, help one rid the system of all the doshas and Pranayama siddhi, accrues without undue effort.

Shatkarma Nirgathasthoulya  
Kaphadoshamalaadhikaha,  
Pranayamam Tatah Kuryaath  
Anasyasena Sidhyeti.

Even though kapalabhati is not a Pranayama in the orthodox system, it works thoroughly on the respiratory equipment. Hence just as for Pranayama, one should choose a place free from noise and other atmospheric pollutants as dust, dirt, unpl-

easant odour etc. After a good workout in asana practice, which should be well planned to include movement of all parts and joints of the body, made possible by a judicious combination of asanas and their vinyasas, and a little rest, one should sit comfortably in Padmaasanam or other sitting postures like Vajra, Siddha etc. It is found however, in practice Padmaasanam is among the best for Kapalabhati. Since the exercise is a highly dynamic one, it is better to choose a posture which can be maintained even in a vigorous activity, involving the use of abdominal muscles. Padmaasana, with the firm interlocking of legs, provides a firm base and enables one to keep the lower extremities under good control. However, for those who have problems in getting into correct Padmaasanam, any other sitting posture like Vajra or Veerasanam may be chosen.

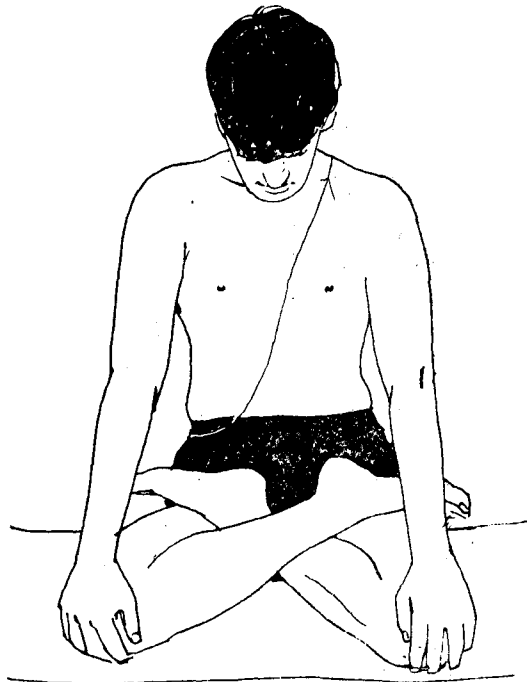
#### METHODOLOGY

Sit in Padmaasanam. Keep the palms on the knees. Slightly bend the head forward as in Jalandharabandha, but the glottis is not constricted. After a few normal breaths, inhale and exhale quickly in succession for about 24 times (or less depending upon one's capacity). The breathing is of the abdominal or diaphrag-

matic type. The abdominal muscles contract quite vigorously and rapidly. In each stroke the viscerae are drawn in and pressed and the diaphragm is pushed up. As soon as the vigorous exhalation is over (It may take about 1 to 2 tenths of a second), the abdominal muscles relax, the abdominal viscerae come down to their original position. Simultaneously the diaphragm also comes down, creating a partial vacuum in the chest cavity and the external air

enter the lungs automatically. Hence the active part of Kapalabhati is the expulsion of air and the inhalation is imperceptibly passive. Then immediately thereafter, for a second round, the abdominal muscles are again contracted and the whole process is repeated for a number of times, say up to 24 or so in the initial stages.

Kapalabhati is primarily an exercise of the viscerae and the diaphragm. It may be noted in practice that even



though this is a breathing exercise, the movement of the chest wall is negligible. The intercostal muscles, in fact, are kept mildly contracted all through and the slight inhalation is made possible only by the mobility of the diaphragm. It could be easily verified in practice and in fact could be used as a check to see if one is doing it correctly. It is clear therefore that inspiration (Puraka) is done silently without effort, as distinct from any deep breathing exercise involving deliberate expansion of the chest requiring the stretching of intercostal muscles. And the expiration (Rechaka) is done with considerable effort at contracting and indrawing the abdominal muscles. Necessarily therefore, when the air is forced out through the nostrils, a noise is produced resembling that of using bellows. Svaatmarama himself indicates it.

Bhastraavat Lohakaarasya  
 Rechapuram Sasambhrame.  
 Kapaalabhatirikhyaata  
 Kaphadosha Viseshini.  
 Hathayogapradeepika

"Practice Exhalation and inhalation rapidly (Repeatedly like a blacksmith's bellows. It is called kapaalabhaati which destroys dosha of Kapha (respiratory or phlegmatic)." Since the Rechaka is slow and imperceptibly soft, the exercise looks as if

it is just a series of vigorous exhalations.

The depth of exhalation is more than normal, but not as high as in deep breathing or Pranayama. The volume of air expelled is reasonably high at about 600 ccs or so (but much less for women and Emphysemic persons).

#### FOUR ASPECTS

There are four aspects to be looked into in Kapaalabhaati. They are:

a) **The intensity of exhalation.** It refers to the force of expulsion and is primarily a function of the strength of the abdominal muscles, provided the respiratory system can take up the intensity.

b) **Rapidity** is the time taken for completing one exhalation and inhalation, and a and b are complimentary and a particular combination, to be found by trial and error by each Abhyasi. Rapidity at the cost of intensity should be avoided. But too slow, with considerable time intervals between two bouts should also be guarded against. In the initial stages, there is concern about one getting a bout of cough or developing cramps in the stomach. In fact in any group class when starting this exercise, one finds at least a fourth start coughing

violently after a few attempts. Hence it is slow and halting in the initial stage. Further there are those with phlegm collected in the respiratory system, which are thrown out during the practice and have to necessarily stop it in the middle. Certain asthmatics who have not been prepared well by preliminary yogasanas may develop a bout of cough which may even precipitate bronchial constriction. It should however be mentioned that kapalabhati introduced at the proper time for an asthmatic is highly beneficial and is actually one of the important aids in treating an asthmatic.

c) **Frequency:** The number of times one has to do Kapalabhati at one stretch again varies from person to person. In the initial stages one may not be able to do for more than 10 or 24 times, but this could be improved even up to a few hundred times. Gasping for breath in the initial stages restricts the frequency. But later on as one is more relaxed and develops second wind, (improved stamina) one may continue until one feels a pleasant exhaustion or fatigue, when one's abdominal muscles are also strengthened, and with increased practice, not only the abdominal muscles but also the pelvic and rectal muscles get actively into play. It is not



necessary to deliberately practice Mulabandham to facilitate expulsion, but some find it useful to make use of contraction of rectal muscles. For the majority, use of pelvic diaphragm and rectum becomes almost automatic. There are a few people therefore who prefer Mahabandha. (Refer Indian Review March 1978) for doing kapalabhaati as the gluteal muscles are raised and the rectum is pressed by the heel facilitating a more conscious involvement of these muscles.

Thus the intensity, rapidity and the frequency for a round of kapalabhaati is to be determined by the practitioner and improved gradually. There should be no violent jerking of the chest, the shoulders and the head. There is a tendency for a few to constrict the nostrils to produce the nasal sound which however is unwarranted. The air expelled is allowed to escape freely through the glottis (no constriction there, please) and smoothly passes (through the

nasal passage) to the end of the nostrils. When even the nostrils are not constricted, they themselves open out a bit in facilitating passage of expelled air. Hence it is not necessary, nor desirable to try to control either of the nostrils nor indulge in facial contortions to regulate the air passage. Anyone who 'makes faces' while doing kapalabhati is not doing a good job of it. The air should be permitted to have a very smooth passage and it will have, if only allowed

without restrictions. It does of course produce some friction at the lower ends of the nostrils, but it does not create any problems. It is not so, if one is careful not to constrict the upper portion of the nose, so that there is no friction in the delicate parts of the mucus membranes lining the interior parts of the nose. Persons suffering from acute rhinitis etc., need not do kapalabhati at the time of acute nasal blocking, but if regularly done, normally nasal block itself will be prevented in the first instance.

The normal speed of doing kapalabhati is about 2 per second. However one may start at about half the pace in the beginning. About 80 to 120 per minute is quite satisfactory. The number of breaths per round may be upto a few hundred, but it will have to be decided by the student with the help of a teacher.

d) Number of times per sitting: A round of Kapalabhati is to be followed by Pranayama, but mere long inhalation and exhalation should suffice for the mere practice of Kapalabhati. This may be done for a minute or so and then the next round may be started. It will be good to do about 3 rounds per sitting, interspersed with a few rounds of long inhalation and exhalation.

Those who have learnt some Pranayama like Uttayi or Nadisodhan, etc., may practice it after Kapalabhati but more of it in later issues.

Kapalabhati should be attempted after some guidance from a teacher. Those suffering from hernia, acute rhinitis, pain in the ear, need not attempt this practice. Asthmatics should do them only under supervision. They will observe that cough develops towards the end of each round. The expectoration should be spat out. In most cases the cough subsides, but even if it continues, after a few days' practice it subsides. It is said that passage of air over the mucus membrane of the air passages acts as an inhibitory stimulus. In Kapalabhati the ratio of time for expiration to inspiration is about 1 to 3. Since during inhalation the sympathetic is stimulated which in turn is beneficial, it could be of considerable use to an asthmatic. Further because of vigorous expulsion due to the upward movement of the diaphragm, the excessive residual air is thrown out. In early stages of functional emphysema, it helps very much in the restoration of the lungs to normalcy.

The congestion in the bronchi and bronchioles is decreased gradually in successive stages. The mucus is blas-

ted out from the bronchial walls and coughed out. After some time there should be very little mucus to excite and thereby precipitate a spasm. Further the powerful expiratory blasts of air through the entire respiratory passage acts as a powerful inhibitory stimulus to the cough centres. Hence cough and the associated spasms of the bronchi diminish. Even for generalized cough, it could be very useful. Since it improves blood circulation to the head and face, one gets a healthier look.

Perhaps equally important, is the fact that the abdominal organs also get thoroughly massaged. The liver, spleen, pancreas, kidney and adrenals, the stomach and the intestines get well massaged and hence have improved vascularity. When combined in a group with such asanas as Sarvangsanam, Paschimottanam etc., it helps greatly alter the shape of the belly from its unseemly half 'S' to scaphoid. Those suffering from irritable colon, constipation certain types of early stage diabetes due to sluggish pancreas, flatulence, dyspepsia will find it beneficial. Pregnant women and those suffering from manorrhagia or fibroid in uterus are advised not to practice. It helps strengthen abdominal muscles and may prevent herniation. Those having

acute pulmonary and or cardiac condition are advised to be extremely cautious in attempting kapalabhaati. For those who are interested in the esoteric aspects of Hatha Yoga, it is said to rouse kundalini Sakthi. The forcible movements of the abdominal muscles, when done properly and intensively press the viscerae the various plexuses of the autonomic nervous

system and stimulate them to activity, and hence one could conjecture the rousing of kundalini sakthi,

Apart from the respiratory system, the digestive and other pelvic organs and the heart also could get massaged. The pericardium is attached to the upper surface of the diaphragm. Therefore with each forcible expiration,

the bout by the diaphragm could massage the heart.

Needless to say, it is absolutely essential that it be practised in an empty stomach. Though it involves a simple technique, it has a salutary effect on the overall circulation of the body. The vibrations set by Kapalabhaati reverberate through all the cells of the body.

