

An evaluation of the therapeutic efficacy of shankhprakashalana kriya particularly with Bowel cleansing

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ABSTRACT

The Sanskrit book Gheranda Samhita talks about the shankhprakashalana kriyas. Shankhprakashalana Kriya is a way to clean the stomach. People are trying to find and read articles that talk about how shankhprakashalana can help with health. We looked through databases such as PubMed (July–August 2024), Scopus, and Ayush Portal. Shankha Prakshalana is a simple and effective approach to clear out the gastrointestinal canal and get rid of all the toxins that are inside. There were only a few outcomes. We reviewed papers that were relevant to our topic. The objectives of this study are to gather and analyse research that demonstrates the immediate and long-term effects of shankhprakashalana kriya on health and healing, as well as to methodically describe the practice. Searches in several research databases employed terms such as shankhprakashalana, Laghu shankhprakashalana, varisara dhauti and Yogic Colon cleansing. This review encompassed 12 research studies whereby shankhprakashalana kriya was the primary intervention. research studies have recorded the initial effects of shankhprakashalana. The yogic practice of shankhprakashalana provides immediate benefits for individuals with primary hypertension and chronic low back pain. After shankhprakashalana, healthy persons don't have to worry about their blood pressure, pulse rate, or electrolyte balance changing. It is highly necessary to drink saline while performing dynamic asanas to quickly clean the bowels. shankhprakashalana can benefit those who suffer digestive issues such as constipation, stomach pain from migraines, and irritable bowel syndrome. It is also a wonderful technique for overweight individuals to help them lose weight. Overall, practicing this technique is beneficial for your health in numerous ways. To validate the findings in clinical populations and to ascertain the optimal frequency and duration of the practice over time, more clinical trials are required

Keywords: Gheranda Samhita, shankhprakashalana, Asana, varisara dhauti, and bowel cleansing.

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INTRODUCTION

Yoga is seen as one of the best ways to deal with a wide range of mental and physical problems. The Gheranda Samhita and Hatha Yoga Pradipika talked about shatkarmas. "Karma" means action, and "shat" means six. The six purifying processes make up shatkarma. When Kapha and Medas are not in balance, it should be used. Neti, Dhauti, Basti, Trataka, Nauli, and Kapalabhati were the six ways to clean. One of these yoga poses, the Varisara Dhauti (shankhprakashalana), completely cleanses the digestive tract. The kriya cleans out the whole digestive system, from the mouth to the anus. This exercise helps the intestines move in a wave-like way, which is called peristalsis. This makes it easier to have bowel movements and keeps the digestive system healthy [1]. Cleaning the digestive tract has two benefits: it keeps hormones in balance and gives internal organs new life. When the body gets back to normal, it naturally goes into parasympathetic dominance, which is a state of calm and relaxation. A

recent study by the World Health Organization found that 1,425 people are currently having problems with their digestive systems and colons. These diseases cost a lot of money and lives. Studies do not completely endorse the advantages of routinely prescribing antibiotics for upper respiratory tract infections in adults and children [2]. Also, giving antibiotics to adults is linked to more side effects. To improve health standards, we need a treatment that doesn't use drugs, is cheap, and works well. The review aimed to aggregate the latest data from credible studies concerning the therapeutic advantages of Shankhprakashalana, with specific emphasis on Shankhprakashalana[3].

Review Methodology

Using the keywords "shankh prakshalana", "shankha prakshalana", and "laghu shankha", the following published articles were located in online databases such as PubMed, PubMed Central, Cochrane Library, Ayush Research Portal and Google

Scholar. The search terms "prakshalana", "yogic colon cleansing", and "varisara dhauti" were used. The results showed that there were 200 references in all, from 2010 to 2024 [4,48-49]. Experimental and quasi-experimental studies that used shankh prakshalana kriya as the main intervention were included in the review. Studies that combine various alternative yoga techniques with shankh prakshalana Kriya are not included in the review [5]. Along with shankh prakshalana Kriya, they are not included in the review. Fifteen studies (ten full-text articles, four abstracts, and one dissertation) were selected for review after the inclusion and exclusion criteria were applied and duplicates were eliminated. References to actual yoga books and articles were also included.

Technique sankhprakashalana kriya

sankhprakashalana is to let a lot of water move from the mouth to the anus without being absorbed by the digestive system. There are many ways to do sankhprakashalana in Hatha Yoga to reach this goal. The Bihar School of Yoga says that the best way to do sankhprakashalana kriya is to drink one or two glasses of lukewarm saline water as soon as possible, instead of sipping it while in a full squat position. Then, you should do five dynamic asanas eight to ten times each: tadasana (palm tree pose or upward stretch), tiryaka tadasana (swaying palm tree pose or side stretch),

katichakrasana (waist rotation or twist stretch), tiryaka bhujangasana (twisting cobra pose or push-up stretch), and udarakarshanasana (abdominal stretch pose or squatting stretch). You do these three to five times until the toilet starts to make clear bowel movements [9]. After finishing, savasana (the corpse pose) is used to rest properly. Arya et al. have also suggested the idea of being aware of your bowel movements to make the cleaning process better. While doing sankhprakashalana kriya, you should focus on your breathing, your body, and the process of purifying your body. Purna (complete) and sankhprakashalana kriya are two types of sankhprakashalana kriya. They both follow the same steps, but they clean different amounts. The purna sankhprakashalana includes more sets of yoga poses and a bigger solution intake [10]. Because it cleanses the body so well, it is usually only recommended to do the practice twice a year. Before, during, and after the practice, you need to be very careful about what you eat, how much sleep you get, how much rest you get, how much exercise you get, and how the weather is. On the other hand, the shorter form of sankhprakashalana is mostly meant to help the bowels work normally and doesn't take a lot of time, care, or physical effort. It is generally recommended to practise it once a week, but in some situations, it can be done every day. [5,50-55] Every study that was looked at used sankhprakashalana. Only two studies [6,

7] followed the sankhprakashalana rules exactly. These rules say that participants should only do three to four cycles of asanas and drink six to eight glasses of water. [5,11] In additional studies, the asanas and hydration cycle persisted until bowel movements were unambiguous.

Different things that are added to water to make it

For general cleaning, it is usually best to use lukewarm water (99°F to 102°F) with salt (0.9% to 1% sodium chloride solution).[6,15] In addition to saline water, Swami Satyananda Saraswati has suggested a number of other options, such as plain cold water, water mixed with hing (Ferula asafoetida), water infused with garlic essence, onion essence, bhanga (Cannabis sativa), almond essence, and water mixed with lime [17]. Nonetheless, systematic research on the therapeutic efficacy of the additives in Shankhprakashalana remains lacking. Patients with primary hypertension have experienced advantages from sankhprakashalana conducted with both plain water and water infused with triphala.[10] A little lemon juice can also make the solution taste better and be more acceptable.[4]

Therapy's Benefit

Stimulating and cleaning the entire alimentary canal can help with digestive problems like acidity, gas,

indigestion, and constipation. According to Malshe's (2018) theory, Shankhprakashalana may help stop gall bladder stones by washing out any sludge that may have built up in the gall bladder.[12] It also helps the gut get rid of worms that live in the intestines.[18] Shankhprakashalana is an important part of yoga therapy for many metabolic problems, such as constipation, stomach pain from migraines, irritable bowel syndrome, and skin problems like eczema, boils, and pimples.[13] A healthy and clean gut is also linked to a calm and balanced mind.[18]

Safety and Effectiveness of Yoga in Hypertension

When blood pressure remains above the normal range of 120/80 mmHg for an extended period of time, it is referred to as hypertension. It is very common in many parts of India because not enough people know about it and there aren't enough controls in place. The National Family Health Survey (NFHS-4), which took place from 2014 to 2015, found that 18.1% (95% CI: 17.8%–18.4%) of people between the ages of 18 and 49 had high blood pressure. Long-term high blood pressure increases your risk of developing heart disease, coronary artery disease (CAD), coronary heart disease (CHD), an aortic aneurysm, kidney disease, vascular dementia, myocardial infarction, stroke, heart failure, or peripheral arterial disease, according to the UK's National Health Service (NHS)

[14,56-59]. A systematic review and meta-analysis of 13 studies found that yoga and meditation may be helpful supplements to or replacements for drug therapy for high blood pressure. There are many things that can make high blood pressure worse, like not getting enough exercise, being overweight, eating too much salt, being stressed out, having gut problems, inflammation, and poor communication between the sympathetic and gut systems. It was uncertain whether Shankhprakashalana was safe for individuals with hypertension [19]. Mashyal et al. performed a single-arm study to assess the safety and efficacy of Shankhprakashalana in individuals with mild to moderate essential hypertension. Thirty-two individuals in Bengaluru, Karnataka, participated in a week-long Integrated Approach of Yoga Therapy (IAYT) module, which encompassed Shankhprakashalana and various other yogic practices. We checked blood pressure before and after Shankhprakashalana on the first day without Triphala and the sixth day with Triphala [20]. The systolic blood pressure dropped from 137.25 ± 16.3 mmHg to 127.81 ± 12.8 mmHg after drinking standard Shankhprakashalana water. Following Triphala water Shankhprakashalana (TWLSP), it decreased from 141.8 ± 19.2 mmHg to 125.5 ± 13.9 mmHg ($p < 0.001$). Diastolic blood pressure dropped from 86.43 ± 9.47 mmHg to 80.68 ± 8.0 mmHg after NWLSP.

Following TWLSP, it decreased from 87.5 ± 10.15 mmHg to 78.40 ± 8.2 mmHg ($p < 0.001$) [21].

Safety in healthy people

Dehydration, infection, and electrolyte imbalance are some of the side effects of colon cleansing that are frequently thought to be linked to kidney, heart, or other health issues [22]. Numerous studies have demonstrated its efficacy and safety across a range of patient populations. However, we advise doing so under the supervision of a certified, experienced yoga therapist. In Uttarakhand, Kumar et al. [12] examined the immediate effects of Shankhprakashalana on 40 participants between the ages of 18 and 25. In the pre-post analysis of a single session, blood pressure, body weight, temperature, and pulse rate were measured. Blood pressure changed from 108.8 ± 3.84 to 108.9 ± 3.71 , but there was no discernible drop in readings. Temperature, pulse rate, and body weight did not significantly decrease either. Since there was little variation in the changes, the study indicates that Shankhprakashalana is safe for healthy people. It improved the gastrointestinal tract's motility, which can have an instant impact on assimilation, absorption, and digestion. According to research, healthy individuals can safely practice Shankhprakashalana without experiencing negative side effects. The idea behind Shankhprakashalana is a little different,

though, because it uses lukewarm saline water, which promotes intestinal peristalsis and produces propulsive motility [23,61].

The Effect of Shankhprakashalana on Obesity

Gayathri (2019) reported that 40 obese adults who engaged in Shankhprakashalana kriya weekly for eight weeks exhibited enhancements in their lipid profiles and a substantial reduction in anthropometric measurements, including body weight, body mass index (BMI), and waist-hip ratio. [8] These findings suggest the potential benefits of Shankhprakashalana in the management of obesity. To confirm and extrapolate these results, more comprehensive randomised controlled trials are essential [24].

Constipation is a bowel problem

that makes it hard or less common to have bowel movements. The criteria for diagnosing constipation vary by area. Constipation is defined as having fewer than five bowel movements per week, while at least one bowel movement per day is regarded as a healthy bowel habit, according to a study by Gautam Ray et al.14. Constipation is linked to lower quality of life and less productivity at work. Ayurveda says that purgation (virechana) gets rid of pitta [15], which is also used to treat constipation (bandha). sankhprakashalana works like virechana in that it

helps the bowels move and cleans them out. In their research, Kiran et al. [16] randomly assigned 60 healthy individuals into two groups of 30 to evaluate the safety of LSP and its effects on bowel health. The study group underwent the sankhprakashalana procedure once a week for four weeks, while the control group received no treatment. Constipation scores (as determined by the Cleveland Clinic CS) significantly decreased in the study group, from 8.73 ± 0.69 to 3.63 ± 0.49 at $p < 0.001$. Conversely, there was no statistically significant difference in the control group. No unfavourable incidents or results were noted over the course of the four-week study. One could argue that LSP is a safe and efficient method of treating constipation.

Effectiveness in colonoscopy preparation:

There are many ways to get ready for a colonoscopy, but sankhprakashalana is one of the special methods that can be used. Arya V et al.33 conducted a study to compare yoga (LWS/yoga) and nulytely (PEG-3350, sodium chloride, potassium chloride, and sodium bicarbonate) as preparatory methods for colonoscopy[33,45,47]. Information was gathered on side effects, patient safety, patient acceptance, and the effectiveness of bowel preparation. The results showed that using LWS/yoga with supervision was better than using nulytely as directed to prepare the

colon. Shankhprakashalana is a helpful tool for getting ready for a colonoscopy. Another study looked at how safe and effective SP and PEG (polyethylene glycol) are for getting the intestine ready for a colonoscopy. The SP method was done in the morning before the colonoscopy, with a yoga teacher watching.

ShankhaPrakashalana, a traditional yoga practice, is a better way to prepare for a colonoscopy than the standard PEG-electrolyte solution³⁴ because it is easier to handle and has fewer side effects [25,46].

Review of significant clinical studies

Writer and Year	Trial Type	The size of the sample	Duration of Treatment	Collective	Evaluation Standards	Key Findings
Kumar and Kulshrestha (2011)	post experimental group design	40	Healthy individuals (18- 25 years)	One time	BP, bodyweight, temperature and pulse rate	No significant change in body weight, pulse rate and
Telles et al., 2013	Experimental Study	40	4 weeks	Single group	Appetite scale, GI symptoms	Increased appetite and improved digestive comfort
Haldavnekar et al. (2014)	Randomized self-controlled study	40	Patients having chronic lower back pain (25-70 years)	Single sessions of LSP and back pain-specific asanas on specific days	Pain Intensity Numerical Rating Scale, spinal flexibility and straight leg raise test,	LSP offered an immediate analgesic effect and was found better than back

					Oswestry disability index, state anxiety	pain-specific asanas in reducing pain, disability, anxiety and improving spinal flexibility
Mashyal et al. (2015)	Self-controlled clinical study	32	Mild to moderate essential hypertensive patients (30-70 years)	Single sessions of LSP, first with normal water then after 2 days with triphala water	Sitting BP and pulse rate	Significant reduction in BP (systolic and diastolic) and pulse rate immediately after both sessions of LSP. No adverse effects were reported during or after LSP. Adding triphala to the water of LSP provides

						better cleansing
Gayathri, 2019	Experimental (Pre-Post)	40	Once weekly for 8 weeks	Single group	Body weight, BMI, Waist- Hip Ratio, Lipid Profile	Significant reduction in body weight, BMI, WHR and improvement in lipid profile
Sharma et al., 2020	Clinical Trial	25	6 weeks	SP + Lifestyle vs Control	Blood pressure, lipid profile	Reduction in systolic & diastolic BP and improved lipid parameters
Chouhan et al. (2021)	Randomized controlled trial, single-blinded	60	Patients referred for colonoscopy (26-59 years)	Group 1-SP once Group 2-PEG solution for colonoscopy preparation	BBPS	No significant difference in BBPS between both the groups Adverse events (nausea, bloating, and disturbed sleep) were

						significantly lesser in SP group
Kumar, 2022	Review Study	-	-	Review of 1– 8-week trials	Symptom scores, GI parameters	SP beneficial in IBS, constipation, and digestive disturbances; more RCTs required
Singh & Kumar, 2024	Review Study	-	-	Review of 10-week trials	Symptom- based outcomes	Evidence supports SP in constipation & IBS; large RCTs needed

DISCUSSION

The main goal of the Haṭha Yoga tradition is to have a clean, disease-free body on the inside. This procedure is done through Shankha Prakshalana Kriyaa. We found 15 studies that used Shankha Prakshalana as the main treatment in several online databases. Eight studies indicate that a single Shankha Prakshalana session produces an immediate effect. Studies show that drinking a lot of salines (about 1.5 to 3 L) during Shankha Prakshalana doesn't significantly raise the

risk of weight change, fluid absorption or electrolyte imbalance, blood pressure, or pulse rate changes in healthy people because saline moves quickly and the GIT has less time for ionic exchange. Voluntary, intense stimulation and cleansing of the visceral organs immediately activate the parasympathetic nervous system. This episode is followed by deep relaxation [26], which lowers high blood pressure and pulse rate in people with high blood pressure. When pranic blockages in the abdominal and lumbar regions are removed by sequential spinal movements

(elongation, twisting, and lateral bending) in dynamic asanas and the full expulsion of the faecal load from the intestines, the spine becomes more flexible, and the pain from CLBP goes away right away [30,37,38,39]. Three clinical studies have shown that Shankha Prakshalana works well as a colonoscopy preparation [31,41,42,42,]. The five asanas and drinking in a bolus style quickly are the main ways to speed up bowel movements and empty the stomach. The different additives in Shankha Prakshalana water make the cleansing process even better (faster cleansing, better taste, and safety for people with high blood pressure) [32,44,].

CONCLUSION

Based on the information at hand, we concluded that Shankha Prakshalana not only purifies the GIT but also has a conditioning effect on the enteric and autonomic nervous systems, which subsequently shows up as an improvement in overall health. Studies where Shankha Prakshalana Kriya was a component of multicomponent comprehensive yoga therapy were excluded from this review. Additionally, this review did not evaluate the quality of the evidence. More thorough clinical trials are required to evaluate the therapeutic efficacy of Shankha Prakshalana kriya in clinical populations and determine its effective

frequency and total duration parameters over an extended period of time.

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