

Asthma

Yoga Therapy Research

By Sophie Smith

Medical view

Analysis of condition

Asthma is a chronic obstructive disease of the lungs. The bronchioles (breathing passages) become overly sensitised to a broad range of triggers resulting in inflammation and excessive mucus. Bronchospasm (contraction of muscles in the airways) causes the airways to narrow even further, which makes it difficult to exhale. This difficulty in exhaling results in the symptoms of an asthma attack.

Symptoms of condition

The symptoms of an asthma attack include difficulty speaking, a tight chest, wheezing, breathlessness and coughing. This can develop over a few hours or sometimes days.

Lifestyle assessment/contributing factors affecting condition

‘Asthma symptoms and attacks (episodes of more severe shortness of breath) usually occur after exercise or exposure to allergens, viral respiratory infections, irritant fumes or gases. These exposures cause an inflammation of the airway wall and an abnormal narrowing of the airways, which lead to asthma symptoms. ‘

Source: <http://www.phac-aspc.gc.ca/cd-mc/crd-mrc/asthma-asthme-eng.php>

A person with asthma may be genetically predisposed with siblings or parents suffering from the disease. Certain conditions trigger asthma, including: air pollutants (tobacco, wood smoke, general pollution, moulds, dust, animal dander, perfumes, chemicals), cold, dry

weather, stress/excitement, or infection (cold, flu, sinusitis or bronchitis). Asthma symptoms in some women are affected by menstruation. Additives known as sulphites often found in foods and wine can bring on symptoms. Being a hay fever sufferer also increases the risk of asthma, and so does having eczema. People with gastroesophageal reflux disease which is a reflux of the stomach may find that it triggers asthma. Exercise or certain physical exertion can bring on the condition. People who work in an environment which is subject to airborne pollutants are more likely to develop asthma.

‘Some people develop asthma for the first time because of something at their place of work – paint, fumes, or dust, for example. They didn’t have asthma when they started the job, but something at work gave them asthma. If you have asthma that developed because of something at work, you’ve got occupational asthma.’

Source: [Diagnosis and Management of Work-Related Asthma: American College of Chest Physicians Consensus Statement](#)". Tarlo *et al.*, Diagnosis and Management of Work-Related Asthma. *Chest* September 2008 134:1S-41S; doi:10.1378/chest.08-0201.

Medical treatments

There are two main kinds of treatment that doctors prescribe. One is reliever medication and the other is controller/preventive medication. Relievers address the symptoms by relaxing the muscles in the airways.

‘Relievers are used to open up the airways (bronchodilation). Constricted airways are experienced as shortness of breath, wheezing and difficulty breathing. There are short-acting relievers that last for about three to four hours and long-acting relievers whose airway-opening effect can last for up to 12 hours. Some of the long-acting relievers have a quick onset of action (as do short-acting relievers) but some have a slower onset.’

Source: Dr Cindy Pan, <http://www.bodyandsoul.com.au>

Controller/preventer medication works to treat and reduce the inflammation in the airways.

The two main types of controller prescribed are inhaled steroids and anti-leukotrienes.

‘Preventers are steroid-based puffers or inhalers for halting asthma attacks or decreasing their severity or frequency. As with the reliever medicines, there are a number of preventers available, varying in dosage and strength. Some may come combined with reliever medicine and some may just be the steroid preventer medicine.’

Dr Cindy Pan, <http://www.bodyandsoul.com.au>

Yogic view

Aspects of condition relative to the 5 koshas:

Physical: structural alignment and doshic assessment of prakrti and

Vakrti/contributing factors affecting condition

Asthma is the result of imbalance in kapha and vata dosha. Aggravation of Vata causes asthma symptoms including constriction of the airways, wheezing and dryness. With aggravated kapha there can be bronchitis, sinus congestion and excessive mucus.

‘According to Ayurveda, it is an aggravation of Kapha and Vata humor. Asthma is a fall out of wrong, improper dietary habits and the accumulation of toxins.’

Article Source: <http://EzineArticles.com/1581660>

There are many contributing factors which include environmental pollution, diet and emotional/physical trauma. In fact perhaps at the core of all of these is often stress and a triggered sympathetic nervous system. The fight or flight response of the sympathetic nervous system, when alerted for an unreal danger, or one that the emotional body cannot

release can result in chronic shallow, incorrect breathing. The body is flooded with adrenalin, a response that becomes ongoing.

The physical manifestation of this can be misaligned shoulders, arms rotating in to protect the upper body and a contracted chest, a protective posture.

Energy: prana and chakra assessment/contributing factors affecting the condition

‘The fourth Chakra is about compassion, service and vocation. It is about acting lovingly. It is our "*centre*," and the first of the spiritual Chakras. The first three are considered "physical.’

Article Source: <http://www.phoenixcentre.com/bodywork/bodywork3-4chakra.htm>

The issues in relation to asthma are linked to the heart chakra *Anahata*. Located in the centre of the chest, it influences the lungs, rib cage, diaphragm, respiratory system, shoulders, arms and hands. Behind this is the involvement of the 1st *Muladhara* and 3rd *Manipura* chakras, caused by fear and not feeling safe. An imbalance is manifested in the heart chakra which leads to contraction and closing in of that area, on a physical as well as energetic level.

The prana is disrupted in a person suffering from asthma with their sympathetic nervous system caught in a flight or fight response on a deep level.

‘Although most asthmatics are unaware of it, we tend to chronically breathe at a rate two to three times faster than normal. Paradoxically, instead of providing more oxygen, overbreathing actually robs our cells of this essential fuel. We *do* take in more oxygen when we overbreathe; but, more importantly, we also breathe out too much carbon dioxide.’

Article Source: Barbara Benagh - <http://www.yogajournal.com/health/127>

This hyperventilation becomes habitual, but is not a natural or healthy state for the body and causes problems. The CO₂ levels in the body are in a delicate balance and it needs to be exhaled in just the right amount. Over-breathing results in an insufficient amount of oxygen

being released to the cells. This causes the oxygen starved body to take action to build up the correct balance of CO₂.

‘Eventually, starved for oxygen, the body takes drastic measures to slow breathing so CO₂ can build back up to safe levels. These measures produce the classic symptoms of an asthma attack: Smooth muscles tighten around the airways, the body further constricts them by producing mucus and histamine (which causes swelling)—and we're left gasping for breath.’

Article Source: Barbara Benagh - <http://www.yogajournal.com/health/127>

This chronic breathing leads to further problems of blocked sinuses and mouth breathing. Poor breathing leads to lack of oxygen to the brain, sluggishness, negative thoughts, depression, and eventually even hearing and vision can be affected. Mouth breathing perpetuates the condition further, as it encourages increased anxiety, and as air breathed in is unfiltered, it is aggravating for the lungs. Nose breathing regulates the diaphragm, helping to prevent hyperventilation. Air breathed in through the nose is much gentler on sensitive airways, as it is warmed and moistened before it enters.

‘We compared breathing through the nose with breathing through the mouth to see if it was possible to show whether there was a difference in the oxidation of the blood. Quite rightly it revealed that breathing through the nose led to a 10 - 15% higher oxidation of the blood.’

Excerpt by Eddie Weitzberg, M.D. Ph.D. - <http://www.yogameditation.com/Articles/Issues-of-Bindu/Bindu-13/Breathe-through-the-nose!>

Psycho-Emotional: mental-emotional assessment/contributing factors affecting condition

In the case of asthma there are issues around being able to trust at a deep core level. To be able to trust and let go, surrender to the highest good. There is a need to control and protect, close in emotionally. Someone or something rocked that trust, and now it's hard to regain.

Bliss: mental-emotional assessment/contributing factors affecting condition

In the case of asthma, there are issues around being able to trust at a deep core level. These issues are very often buried deep in the psyche. It could have happened in childhood or adulthood, a trauma that causes fear then forms a pattern of which it is hard to become conscious. There is a lack of awareness at being in a state of fight or flight, because it has become normal.

‘Since few of us are immune to the constant stresses and strains of modern life, the alarm bells of the sympathetic nervous system are constantly being rung. It is a real juggling act to maintain a healthy autonomic balance, a challenge at which asthmatics generally fail.’

Article Source: Barbara Benagh - <http://www.yogajournal.com/health/127>

Due to this perceived safe state of ‘normal’ there is a resistance to change because change brings up that buried fear, those difficult emotions and uncomfortable wide open vulnerability.

Where there is love there is no fear, so in this condition that state of love in its fullest is blocked.

Wisdom: higher-self-identity assessment/contributing factors

‘*Vijnana* means *knowing*. It is the sheath of wisdom that is underneath the processing, thinking aspect of mind. It knows, decides, judges, and discriminates between this and that, between useful and not useful. It is also the level of ego consciousness, meaning the powerful wave of I-am-ness. This I-am-ness itself is a positive influence, but when it gets co-mingled with the memories, and is clouded over by the manas, it loses its positive strength.’

Article Source: <http://swamij.com/koshas.htm#vijnanamaya>

In the case of asthma there is a disconnection from this wisdom and positive source of truth. The disconnection is like a veil that masks the much needed strength that would allow the person to shift from the sympathetic ‘flight or flight’ adrenalin state to the parasympathetic nervous system which governs relaxation response. This shift cannot be made until the person opens to that which is beyond the thinking mind. Past impressions, emotions, memories and judgements are often partly unconscious and difficult to look at, but at the same time they are still sending out fear and alarm messages to the being.

Bliss: Spiritual issues assessment/contributing factors affecting condition

By being caught in the mind and in a constant fear state, the asthmatic is disconnected from their innate inner bliss. There is a resistance to let go and surrender, to be off guard or out of control which means that deep relaxation is not possible. Without a state of relaxation, where the mind can rest and let go and the person can just ‘be’, they will not be able to experience the bliss and peace within.

‘Attaining and balancing this Kosha requires an active and conscious being on our part in order to pull the beauty out of every experience. It is not just about a positive attitude but about living with passion. This Kosha is sometimes the hardest for people to achieve balance in, as parts of the other Koshas’ imbalance interfere with full and proper expression of this one.’

Article Source: <http://evolvingbeings.com/posts/45/accessing-bliss-using-the-5-koshas/>

It is a vicious circle as the fear perpetuates the physiology of the asthmatic condition and then the physiology perpetuates the fear and negative state. Without experiencing this bliss, the asthmatic is unable to trust and let go, which is crucial for the healing process.

Healing Program: yogic therapies

Here are the program aspects which are built up from simple practices and change to more involved, depending on the experience, response and commitment of the client.

1. Structural alignment:

To address the contraction of the chest and rolling in of the arms, the focus needs to be on a bright inner body and on correctly realigning the shoulders and arms.

Drawing the arm muscles to the bone on all sides draw the top of the arm bones back, the shoulder blades then move towards the spine and slide down the back. The shoulders move down away from the ears and the upper arms externally rotate.

Lengthen the side body from the hips to the under the arms. This results in the collarbones lifting and the throat opening. The chest and throat can then relax and open, making more space for the lungs and full breath capacity. Correct alignment balances all 3 doshas.

2. Yogic breathing practices:

One of the first steps in working with a person with asthma is to get them to focus and become aware of their breathing. If they breathe through the mouth then there are techniques that help to unblock the sinuses such as exhaling holding the nose and shaking the head up and down for a few seconds until they need to inhale and repeat if needed. Cutting out or reducing dairy will help to reduce and in some cases eliminate mucus, as will following the dietary guidelines.

Gentle pranayama can be practiced when in a very relaxed state, increasing and slowing the exhalation and including a pause. This is corrective for the fast, shallow breathing but needs to be practiced gently, taking regular breaths as needed with focus and awareness:

Asthma breath work part 1:

Abdominal breathing – Lay on back, knees bent, head supported, hands on abdomen, focusing on how it sinks towards the spine on exhale.

Asthma breath work part 2:

The Wave – Now with arms placed alongside the body, relax the lower back into the floor. Focus on the belly and how it sinks towards the pelvis on the exhalation and lifts a few inches on the inhalation, keeping hips on the floor. Do 10-15 rounds.

Asthma breath work part 3:

Balancing the inhalation and exhalation – Shortening inhalation to half the length of natural exhalation. It can be calculated by counting the length of the exhalation. Pause after each exhalation. Do 10-15 rounds.

Asthma breath work part 4:

Complete diaphragmatic exhalations – With pursed lips, make a long, extended but comfortable exhalation through the mouth, with a pause, feeling the abdominal muscles contract. Inhale naturally through the nose. Work on extending the exhalation to be twice the length of the inhalation.

Asthma breath work part 5:

Extended pause – This exercise can prevent an asthma attack by regulating CO₂ levels. Shorten inhalation and exhalation slightly, make sure that the exhalation is twice the length of the inhalation and pause and relax after the exhalation. Do 5-10 rounds.

3. Gentle hatha yoga:

With the focus on breath and movement, do gentle asanas which open the chest area and release tension from the body. A slow mindful practice with synchronised movement and breath works on relaxing and calming the mind. Building up from a simple sun salute practice to add more poses and adjust the program accordingly to their needs.

- **Sun salute sequence *Surya Namaskara*:** (Modified according to ability) Sun Salute ventilates the lungs and brings oxygen to the blood, broadens the chest, calms the nervous system and balances the doshas, facilitating the release of toxic gases in the system.
- **Warrior 1 *Virabhadrasana*:** Stimulates the lungs and heart, helps deep breathing. Relieves tightness in shoulders.
- **Triangle *Utthita Trikonasana*:** Opens chest and shoulders and tones the respiratory system, balances doshas.
- **Body fold pose *Uttanasana*:** Increases blood flow to the lungs and calms the brain.
- **Cobra pose *Bhujangasana*:** Expands and increases flexibility of the chest and strengthens the lungs and heart
- **Extended child's pose *Utthita Balaksana*:** reduces stress and fatigue
- **Bridge rolls *Setuasana*:** strengthens and opens the heart and lungs, opens and rotates upper arms.

- **Reverse posture mudra *Viparita Karani Mudra***: Balances doshas, strengthens and balances all the body systems. Promotes healthy function of respiratory system. Good for asthma.
- **Plough pose *Halasana***: strengthens shoulders and back, balances doshas.
- **Fish pose *Matsyasana***: strengthens the lungs, corrects rounded shoulders, tones vata, good for asthma.
- **Reclining spinal twist *Jathara Parivartanasana***: relaxes and rejuvenates body, increases flexibility in shoulders, tones the nervous system.
- **Corpse pose *Shavasana***: Rejuvenates, calms the mind, reduces stress, releases tension, balances doshas.

4. Restorative yoga:

In restorative yoga, the body and mind can relax and release. The client is encouraged to let go and enter a deep state of relaxation. This works at calming the adrenals and mind, and activates the parasympathetic nervous system. Breath naturally slows as the client relaxes. One or two restorative yoga poses should be practiced on a regular basis and fitted into the daily routine:

Legs up the wall *Viparita Karani* can be practiced with or without a cushion/blanket under the hips. This calms the mind, the adrenals and the breathing, as well as restoring the circulatory and immune system. It balances vata.

‘Observe how this stillness supports you, how even when you let everything you know about yourself dissolve, you are still buoyed by the world. With each quiet exhalation, see if you can drift a little closer to the stillness that lies at the very heart of the universe. Let yourself float in this soothing silence for as long as you desire.’

Excerpt By Claudia Cummins: <http://www.yogajournal.com/basics/1140>

Supported back bend with the legs straight to restore and rejuvenate. The chest and heart opens and expands in this pose. The immune system is stimulated, which helps with allergies that often affect the asthmatic.

Back stretching pose *Paschimottanasana*: supported with bolsters or blankets. Calms pitta, helps relieve lung congestion and calms the adrenals.

5. Meditation

Daily guided meditation with a focus on opening and balancing the heart chakra and that encourage deep relaxation, calming of the mind and breath. A practice to help connect with inner bliss.

Yoga Nidra practiced at least 3 times a week, which works on the chakras and deep restorative relaxation, to calm the nervous system and slow the breathing.

6. Diet

Eat a light fresh natural, organic diet, low in animal fats and high in healthy omega oils and healthy vegetable fats. Eat plenty of fresh fruits and vegetables, seeds, beans and lentils. Include whole grains that are high in nutrients. Avoid or reduce dairy to help with lung congestion and toxic build up in the body. Reduce animal fats and sugar as they cause inflammation. Stop smoking if smoking. Moderate your caffeine and alcohol consumption to help the immune system and adrenals. Avoid asthma triggers where possible. Avoid highly processed/ junk/fast food. Eat an anti inflammatory diet as much as possible. Fasting a few times a month is helpful, just drinking vegetable juices to cleanse the system of toxins.

7. Lifestyle

Focus on things which inspire love, that bring joy and fill life with such things. Focus on the positive. Become aware of emotions, sensations and tensions throughout the day and embrace and 'be' with them, let them release. Treat oneself kindly, there may be times when it's harder and there are difficult things to face. If in a stressful situation, look into options that will induce calm, to help or make a change. Practice patience, as it takes time to change habits. Become aware of the breathing method, and practice the appropriate breathing techniques to retrain the breathing habits. Be surrounded with inspiring things, whether books, music or art, things that bring enjoyment and relaxation.

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