

## Management of mucus related respiratory health problems through sinuses and airways cleaning exercises

**Manikonda Prakash Rao**  
Hyderabad, India

**Introduction:** The objective of the paper is to create awareness among people about alternative and complimentary methods to control respiratory diseases. The diseases (common colds, sinusitis, bronchitis, asthma, chronic obstructive pulmonary disease etc.) cause the following changes in airways 1) Inflammation: Is a physiological process and plays the role of immunological defense against infection, injury or allergy 2) Hyper secretion of mucus: is the result of goblet cell hyperplasia in respiratory mucosa and is a prominent feature of inflammation. It is a major pathological feature. 3) Bronchospasm: Is an additional factor in asthma patients. It is caused as a result of injury or trauma of smooth muscles around airways. The three factors together cause breathlessness.

**Methods:** Exercises are therapeutic tools. They are mucokinetics and a recipe for healthy ageing. They reduce C-reactive protein resulting in reduced inflammation. Exercises strengthen the remodeled airways and reset the biological ageing process. They are a) Upper airway passages cleaning exercises: These exercises should be practiced with hypertonic solution i.e., a solution having greater osmotic pressure than that of cells or body fluids and draws water out of cells thus inducing plasmolysis. Osmotic pressure varies with concentration of solution and with temperature increase. b) Bronchial airways cleaning exercises: They are based on reserve volumes and forced expiratory techniques. They help in draining out excess mucus from bronchial airways. c) Physical, aerobic and yogic exercises: Strengthen the inspiratory, expiratory muscles and make the airways flexible.

**Conclusion:** Any mucus related respiratory health problem commences from upper airways and spread to tracheo bronchial tree as they constitute only one pathway. The mucociliary clearance mechanism becomes defunct when excess and sticky mucus forms. Once they are cleaned, the defunct cilia become active and ciliate mucus towards nasal passages and it can be blown out easily. The bronchial airways cleaning exercises help in draining out total mucus from airways. The respiratory and other diseases originating from its pathway come under control. Healthy ageing process commences.

### Biography

Manikonda Prakash Rao has done his Post Graduation in Law and is a Gold Medalist in Constitutional and International Laws from Osmania University Hyderabad in the year 1977. He has presented his papers to various international conferences including AIIMS New Delhi for their 1<sup>st</sup> and 2<sup>nd</sup> International congresses on Gerontology and Geriatric Medicine 2009 and 2012; World Allergy Organization of US for their 1<sup>st</sup> and 2<sup>nd</sup> Scientific conferences on Allergy, Asthma, held at Dubai and Hyderabad, 2009 and 2012 respectively; 1<sup>st</sup> International congress on Healthy Aging organized by Healthy Aging Society, Malaysia, at Kualalumpur 2012 and 14<sup>th</sup> National conference of National College of Chest Physicians and Indian Chest society held at Bhubaneswar 2012. He has sent his modified papers to 15<sup>th</sup> National conference of National College of CHEST Physicians and Indian Chest Society being held at Chennai in the month of November 2013 and International conference on Multidisciplinary Health Care being organized by AIIMS New Delhi in 2014. Presently he is treating patients at various Health camps organized by International Lions club, Gandhi Nagar, Hyderabad.

mani\_prakash73@yahoo.com