

#### 9th Indo Global Summit on

# **Cancer Therapy**

### November 02-04, 2015 Hyderabad, India

## Prevention and management of respiratory diseases including lung cancer through exercise interventions

Manikonda Prakash Rao

International and Constitutional Laws, India

**Objective:** The objective of the paper is to create awareness among people about alternative and complimentary methods to protect themselves from respiratory diseases like asthma, bronchitis, chronic obstructive lung disease, cancer etc.

Background: The following changes take place in airways as a result of lung diseases 1) Inflammation: Is a physiological process and plays the role of immunological defense against infection, injury or allergy 2) Hyper secretion of mucus: Is a major pathological feature of diseases. It is the result of goblet cell hyperplasia in respiratory mucosa and is a prominent feature of inflammation. Chronic mucus hyper secretion is a potential risk factor for an accelerated loss of lung function. It is a common feature in elderly. The thick viscous mucus in the lungs will be conducive to pathogens. Continued inflammation and mucus hyper secretion may significantly contribute to transformation of normal cells into cancer cells. 3) Broncospasm: It is an additional factor in asthma patients. The three factors together cause breathlessness. Further, chronic inflammation and its prominent feature, hyper-secretion of mucus are the fuses that ignite cancer. Without these factors, there cannot be inflammatory cell recruitment to the site of infection, injury or allergy. Continued presence of inflammatory cells or carcinogens may lead to cycles of tissue injury and repair resulting in carcinogenesis of airways. Therefore, treating these two factors is very important for airway integrity and to protect from airway diseases including cancer. For resolution of the said factors, a rapid programmed clearance of excess mucus is necessary. As a result, the origin of it inflammation gets resolved. A little medicinal assistance may become necessary.

Methods: Exercise is a potent medication in history. They are mucokineses and a recipe for healthy ageing. Exercises strengthen the remodeled airways and reset the biological ageing process. They are a) Upper airway passages cleansing Exercises: They help in cleansing mouth, nose and pharynx, the primary sites of colonization of pathogens and the sinuses, the way stations to the brain. 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. b) Bronchial airways cleaning exercises: They are based on forced expiratory techniques. They help in draining out excess mucus from bronchial airways. c) Physical, aerobic and yogic exercises help in strengthening the inspiratory and expiratory muscles.

**Conclusions:** Any mucus related respiratory health problem commences from upper airway passages and spreads to tracheabronchial tree as they constitute only one path way. The mucociliary clearance mechanism becomes defunct when excess and sticky mucus forms. Once the upper airway passages are cleaned of it, 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 completed his Master's Degree in International Law and Legal Studies. He is a Gold Medalist in International law and constitutional law. He presented papers at International Medical conferences. So far he presented about 15 conferences including All India Institute of Medical sciences, New Delhi for Geriatric conferences, WAO of US for the conferences on asthma immunology and allergy etc. Recently he presented paper at Indo Global health summit and expo at Hyderabad on Lung cancer -Prevention and Management through exercise interventions.

manikondaprakashrao@gmail.com

**Notes:**