

A Deliberation of Visha Chikitsa in Pratishaya

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Abstract

Modern civilization has diseased the humans from mosquito coils and other environment particular matters. Acharya's have explained that if human habitat is of vishakatvayu (also deshaetc) leads to pratishaya and shirorogas. Hence we like to deliberate that visha is one nidan for Pratishaya. AcharyaSushruta has very shrewdly explained in Kalpasthana that when person exposes vishavayu's then he suffers from Akshiroga, pratishaya etc. Recent researchers have bridged the gap between gaseous toxins that cause respiratory allergic disorders. By these modern considerations and not deviating from basics of Ayurveda we can understand visha chikitsa is applicable to couple of modern day disorders.

Keywords: Allergy; Environmental Air Pollution; Particulate Matter (PM); Ozone (O₃); Nitrogen Dioxide (NO₂).

Introduction

There is increasing evidence of the negative health impact resulting from environmental air pollution, Indoor particulate matter and Carbon Monoxide (CO) levels during the burning of mosquito coils, in particular that associated with respiratory diseases and allergy. Although the exact mechanisms behind this rapid increase in prevalence remain uncertain, a variety of air pollutants have been attracting attention as one causative factor. Epidemiological and toxicological research suggests a causative relationship between air pollution and the increased incidence of asthma, allergic rhinitis, and other allergic disorders [1]. Experimental exposure studies also indicate a causative relationship between air pollution and allergic airways disorders through the induction of inflammation and oxidative stress in the lungs leading to a preferential T-helper type 2 lineage [2].

Aim and Objectives

In this review, we will examine this evidence implicating the deleterious effect of environmental pollution.

Review (Material)

Environmental pollutants that are directly emitted into the atmosphere are primary pollutants such as sulphur dioxide (SO₂), some nitrogen oxide (NO) air pollutants, consisting of nitric oxide (NO) and nitrogen dioxide (NO₂), carbon monoxide and particulate matter (PM). PM is a mixture of particles varying in number, size, shape and chemical composition and produced particularly by diesel-powered motor vehicles but can also be produced from diverse sources, such as factories, power generation, wood burning and biomass fuel, on construction sites, and from mining areas. Other constituents of PM include transition metals, polycyclic aromatic hydrocarbons, and environmentally persistent free radicals^[3]. These have been noted to induce Sino nasal mucosal irritation and often contribute to the multifactorial cause of chronic rhinitis and allergic rhinitis. Recent data published by the Health Effects Institute indicate that a 10 µg/m³ increase in PM 10, the coarse particulate fraction of air pollution, is associated with an increase in mortality of 0.6%

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in daily all natural cause mortality in major cities in India and China [3]. The health effects of air pollution particularly on the common lung diseases such as asthma and COPD are also being felt particularly in Asia. The low levels of allergy and asthma that have been seen previously are now rising.

Various types of mosquito repellents are widely used to prevent mosquito bites. A cross-sectional survey was conducted in 3 villages where 465 individuals which showed prevalence rates of respiratory symptoms and diseases were higher in subjects using MCs although not statistically significant. Those living in smaller homes and using MCs had significantly greater morbidity. Manohar S et al also found that out of 613 patients 212 patients who have either allergic asthma or allergic rhinitis showed exposure to mosquito repellents which are toxic chemicals and suggested that It may cause allergic and respiratory problems even through in a low safe concentration [4].

Allergic rhinitis (AR) and asthma are both inflammatory diseases and are associated. Allergic

rhinitis is characterized by air way inflammation and blood eosinophilia. Asthma is present in 20-50% of patients with AR, and up to 80% of patients with asthma have AR [5,6]. Allergy involves the production of a special class of antibody called immunoglobulin E. (IgE) which has been found only in mammals. These antibodies are bound to specific cells called mast cells, found in the skin, lungs and in many other tissues. Mast cells contain many powerful chemicals including histamine, that when released, causes an itching, Itchy red rash and other allergic manifestations also such as watering of nose, sneezing, wheezing, cough etc.

The following phenomenon is just like old wine in a new bottle for age old Ayurveda knowledge. Acharya have explained many such contextual references that environmental toxicity can lead to exacerbation conditions like Pratishaya, kasaswasa and aksirogas etc.

Sushruta very shrewdly explained that visha yuktavayu is the nidana for Pratishaya in kalpasthana [7].

धूमेऽनिले वा विषसम्प्रयुक्ते खगाः श्रमार्ताः प्रपतन्ति भूमौ |
कासप्रतिश्यायशिरोरुजश्च भवन्ति तीव्रा नयनामयाश्च ||१६||

To complement the above statement sushruta also refers in rutucharya that if the rutu gets vitiated due many reason and visha being one among them also causes shirorogas.

Dushivisha is also a condition exclusively told in vishachikitha. In this visha settles in body or if low potent toxins are entering in the body on regular basis then they get accumulated [8].

जीर्ण विषघ्नौषधिभिर्हतं वा दावाग्निवातातपशोषितं वा ||२५||
स्वभावतो वा गुणविप्रहीनं विषं हि दूषीविषतामुपैति |
वीर्याल्पभावान्न निपातयेत्तत् कफावृतं वर्षगणानुबन्धि ||२६||

After that produces diseases on exposure to dusitadeshakalaanna etc. Here if visha settles in amashaya then sushruta tells it produces vatakapahajarogas. If one considers her vishayuktavayu as nidana then continuous exposure of it leads to Khavaigunya in nasapradesha leading

to pratishaya. And on this basis If person gets exposed to dusitadesha (rainy area) or kala (meghachaditaie cloudy climate etc or exposed to same climate of vishayuktavayu) The symptoms of Pratishaya gets exacerbated[8].

दूषितं देशकालान्नदिवास्वप्नैरभीक्षणशः |
यस्माद्दूषयते धातून् तस्माद्दूषीविषं स्मृतम् ||३३||

Discussion

shalakhyatantrabaspa, dhuma and raja are the basic nidana for causation of Pratishaya [9].

If one analysis the nidana's of pratishyaa in

सन्धारणाजीर्णरजोतिभाष्यक्रोधर्तुवैषम्यशिरोभितापैः |
 प्रजागरातिस्वपनाम्बुशीतैरवश्यया मैथुनबाष्पधूमैः || १०४ ||
 संस्त्यानदोषे शिरसि प्रवृद्धो वायुः प्रतिश्यायमुदीरयेत्तु |
 घ्राणार्तितोदौ क्षवथुर्जलाभः स्रावोऽनिलात् सस्वरमूर्धरोगः || १०५ ||
 नासाग्रपाकज्वरवक्त्रशोषतृष्णोष्णपीतस्रवणानि पित्तात् |
 कासारुचिस्रावघनप्रसेकाः कफाद्गुरुः स्रोतसि चापि कण्डूः || १०६ ||
 सर्वाणि रूपाणि तु सन्निपातात् स्युः पीनसे तीव्ररुजेऽतिदुःखे | १०७ |

Hence dhuma and baspa can be considered as vishayuktavayu in present scenario. Based on this bridge we would like to state that visha is one nidana for causation of Pratishaya. Chikithsa for the Pratishaya would also fall under the roof of Agadatantra where the siddantha for chikithsa is drugs which are vatakapahara along with

vishagnagunas. Acharya have briefed dushivishachikithsa with shodhan followed by dushivishariagada explain some drugs of formulation as vishagna). Similarly one can also find aushadikalpa in baspavisha and visha haraoushadhis are like Haridra, Kusta, Shirish, Abhaya, Ativishaetc

दूषीविषार्तं सुस्विन्नमूर्ध्वं चाधश्च शोधितम् |
 पाययेतागदं नित्यमिमं दूषीविषापहम् || ५० ||
 पिप्पल्यो ध्यामकं मांसी शारः परिपेलवम् |
 सुवर्चिका ससूक्ष्मैला तोयं कनकगैरिकम् || ५१ ||
 क्षौद्रयुक्तोऽगदो ह्येष दूषीविषमपोहति |
 नाम्ना दूषीविषारिस्तु न चान्यत्रापि वार्यते || ५२ ||

Environmental air does contain a complex mixture of toxins, including particulate matter, diesel exhaust particles and stable dust which causes airway hyper-responsiveness. This AHR causes imbalance between Th1/Th2 immune response. So herewe can consider khavaigunya as airway hyper-responsiveness due to environmental particulate matter and dust.

Khavaigunya produced in Pratishaya is by the exposure to vishayuktahavayu, dhuma, raja in pranavahasrotas. Parallel to this virudha and vishayuktaahara and vihara is being exercised leading to Kapha and Vataprakopa. Doshivishari Agada is having almost equal percentage of madhura, katu, tikta, kashaya rasa and vipaka as madhura, katu with doshagnatha as majorly kapha and vatahara [10]. Other aspect of the concept is that if vayu is visha yuktathen how to get cleanse the air and may be even the present scenario for insect repellent would hold well which is a window foe further research.

Conclusion

There is now sufficient evidence to indicate that the observed detrimental impact of environmental and indoor air pollution poses significant adverse effects on allergic diseases and respiratory health, while its risk level may be modified by the temporospatial and meteorological changes. Children and the elderly are particularly vulnerable to the effects of air pollution. By these modern considerations and not deviating from basics of Ayurveda we can understand visha chikitsa is applicable to couple of modern day disorders.

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