



OCCUPATIONAL HAZARDS AND ITS RELATED DISEASE

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ABSTRACT Which means that an occupation / job is the identity of an individual, which indicates the importance of it in each person's life. Ayurveda is an Indian system of medicine that has been practiced for over 500 year. Human's occupation can be kritrim visha. The relation between occupation and human health is a fundamental aspect of Ayurvedic health system. Chemical substances such as herbicide, pesticide, cement used by labour and other chemical can adversely effects one or several of the body systems, There can be many more diseases such as stress, heat stroke, tinnitus, frostbite, dryness of eyes, pains of different types, skin disease and other many disease. . In the recent times, the traditional Indian system of medicine Ayurveda is gaining popularity in both India and world. These occupational diseases and hazards in industry and explains the Ayurvedic treatment, dietary regime, Ayurvedic dincharya and techniques for increasing general strength of the persons affected by occupational hazard. Ayurvedic system of medicine promote the occupational health of the worker's do work in mines factory and former used pesticide and herbicide.

KEYWORDS : Ayurveda, occupational health, Hazards, kritrim visha

INTRODUCTION-

An occupation, apart from being a means of livelihood, is also a source of identity for a person in the society. Occupation helps in the growth and evolution of a person physically, mentally, emotionally, spiritually and socially. Any dangers or mishaps encountered at the work front are called 'occupational hazards'. These work-related accidents and work related diseases are the biggest problems in developing countries. Occupation is an integral part of people's life which has significant impacts on quality of life. People spend about one-third of their lifetime in their working occupation. Different occupations and working conditions produce varied effects on the health of the worker. It is important to promote health condition, prevent diseases and maintain working capacity of the workers. Occupational health is the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations by preventing departures from health, controlling risks and the condition of work to people, and people to their jobs¹.

The most common hazardous chemical in the health sector include cleaning and disinfecting agent, Arsenic, Mercury, toxic chemical, pesticides, herbicides latex and lab chemical. The most common occupational infection of concern in the health sector is skin disease, Tuberculosis, Hepatitis B&C and respiratory infection.

Materials & methods:-

A thorough and Careful perusal of the *Ayurvedic* literature like *Sushruta Samhita*, *Charaka Samhita* and *Ashtanga Hridaya*, *Yogaratanakara* along with the contemporary medical textbooks and websites were also reviewed.

Occupational hazards:

Some chemicals cause dermatitis, eczema, and even cancer etc by primary irritant action; some cause dermatitis by an allergic reaction. Some chemicals, particularly the aromatic and amino compounds such as TNT and aniline are absorbed through the skin and cause systemic effects. Occupational (*Dooshivishajanya*) kushtha was clinical condition diagnosed in the present time, which can be taken as toxic manifestation of skin due to visha (*Dooshivisha*-latent toxic) due to contact relation with occupational chemicals, pesticide, herbicide contact allergens, contact irritants, allergy to metal. These chemical, pesticide, herbicide, allergens, irritant, acts as *Dooshivisha* (cumulative poison); is a form of toxin that has not been completely eliminated or neutralized due to various reasons, remains in the body for some time and eventually gets manifested in the form of some disease². Due to *Dooshivisha*, many skin diseases are said to appear like *mandal* (vesicles/boils), *kotha* (round patches and rashes on the skin), *kitibha kushtha*³.

Broadly classified into five types. They are: Physical, Chemical,

Biological, Mechanical and Psycho-social Hazards. All these take place by three types of interactions in the working environment, namely:

1. Man and physical, chemical and biologic agents
2. Man and machine
3. Man and man

There a number of occupational hazards/diseases, this article deals with a few selected occupational hazards disease like skin disease⁴.

Selection of drug -

The drugs with kapha pittaghna, ruksha guna, teekta rasa properties, primarily *vishaharam*, *kushthaghna*, along with *aamhara*, *kandughna*, *deepana*, *pachana*, *rakta Shodhaka* (blood purifier), *Shotha hara* (anti-inflammatory), *Vrana shodhana*, *Ropanam*, *Vata anulomana* and *pitta rechak* were chosen and prescribed at different stages eg. *Aragwadhadi kashaya*, *Potalkaturohinyadi kashya*, *Bilvadi vati Guduchiyadi kashaya*, *Kalayanaka ghrita*.

PHYSICAL AGENTS	OCCUPATION	PATHOLOGICAL FINDINGS	MANAGEMENT
HEAT	Foundries, glass and steel Industries, mines, cotton and jute industries.	1. Burns-superficial involving epidermis, partial thickness involving dermis and full-thickness involving sub-q tissue and muscles—rapid shift of bodily fluids into the interstitial compartments; Development of hypermetabolic state 2. Heat cramps-loss of electrolytes and voluntary muscle cramps. 3. exhaustion- Heat failure of CVS to compensate for hypovolemia following water loss. 4.Heat stroke CBT>400C generalasied vasodilation and peripheral pooling of blood.	Sheeta pralepas like Chandana,Ushira. Kasmarya, Madhuka, Nilotpala,sariva. Sarivadi gana.Nyagrodhad i. Application of Shata dhouta ghrita in moderate and mild degree burns.

COLD	Soldiers, homeless people.	1.Direct effect- disruption of cells by crystallization of intra and extra-cellular water 2. Indirect effect- period of ischemia, hypoxic changes and infarction of the affected tissues.	Application of sheeta prashamaka lepas like Agurvadi,Tagara, Dhanyaka,vacha, kantakari Agnimantha,Syon aka. Punarnava mandura, Makaradhvaja Rasa for enhancing oxygenation in the body.
Dadru (Ringworm)	Work at moist place people.	Elevated and circular shaped of the patch, Itching, look like purple or coppery, spreading and having eruption ⁵ .	Laksa, kustha, sarsapa sriniketa , ratri vyosa, seed of cakramarda and mulaka bija are all macerated together with butter milk and the paste applied for cure of dadru ⁶ . Citrakadi taila.
Vicarcika (Eczema)	Used of pesticide and herbicide by former.	Very itching, painful and dry, appear all over the body ⁷ .	Kwath of priyala, sala, aragvadhya, nimba, saptaparana, citraka marica, vaca and kustha. used for drinking and anointing. Bhallataka,Abhaya, and vidanga, used for drinking and anointing. Bhallataka tail is used ⁸ . Bhallatakavaleha, Citrakadi taila ⁹ . Arka tail.
Ekakustha/kitibha (psoriasis)	Used of pesticide and herbicide by former. And other type of allergens.	Does not perspire, is extensive, like fish-scales ¹⁰ . The entire body becomes blackish.	Swetakarviradya taila, Aragwadhadi kashaya, Bhallatakavaleha. Kwath of Bhallataka, abhaya, and vidanga, used for drinking and anointing. Vyadhiharana Rasa.

If the spot which is stony hard, rough, benumbed, stable and old, the patient should be advised to take some anti-poison drug and then the spot should be anointed with some poison followed by anti-poison drug¹¹.

Apply the Swarasa of unmatta patra up on the head it will cure Indralupta¹².

Make snana and pana with Karaveera panchanga Kwath, it will subside the kustaroga¹³.

Apply the paste that is prepared by karaveera patra kalka and taila, it will cure the pama¹⁴.

Kusta will subside by taking the combined decoction of Ballataka, Haritaki and Vidanga and also cure by taking Ballataka taila internally¹⁵.

DISCUSSION:-

Occupational hazards are a multidisciplinary activity aimed at:-

Protection and promotion of the health of workers by preventing and controlling occupational diseases and by eliminating occupational factors and condition and treatment with Ayurvedic. Occupational diseases are adverse health conditions in the human being, the occurrence or severity of which is related to exposure to factors on the job or in the work environment. Such factor can be physical, chemical, biological, ergonomic, psychosocial and mechanical.

Characteristics of occupational diseases:

Healthcare providers often overlook the occupational cause of occupational disease. This is due to several special characteristics of occupational disease that its occupational origin. The clinical and pathological presentation of most occupational diseases is identical to that of non-occupational disease for example skin disease, asthma. Occupational disease may occur after the termination of exposure.

The clinical manifestations of occupational disease are related to the dose and timing of exposure. Occupational factors can act in combination with non-occupational factors to produce disease.

CONCLUSION:-

After critical analysis of different ayurvedic classical textures it is concluded that different types of Occupational hazards and their symptoms are mentioned in ayurvedic textures. so their treatments are also mentioned in these ayurveda classics. So it is necessary to find out their treatment protocols which are scattered in ayurvedic classics. It may be very useful in modern period for the treatment of occupational hazards.

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