



International Research Journal of Ayurveda & Yoga

An International Peer Reviewed Journal for Ayurveda & Yoga



SJIF Impact Factor : 5.69

ISRA Impact Factor : 1.318

ISSN:2581-785X

Review Article

Volume: 3

Issue: 9

Ayurveda preventive measure for environmental toxicity induced skin disease and its management

Dr. Vandana chandel¹ Dr. Anita Sharma² and Dr. Seema yadav³

1- P.G. scholar, P.G. Dept. Of Agad Tantra, NIA, Jaipur

2- Professor/HOD, P.G. Dept. of Agad Tantra, NIA, Jaipur

3- P.G. scholar, P.G. Dept. of Agad Tantra, NIA, Jaipur

ABSTRACT: Natural toxicant incites Skin illness has been expanded in India. The toxicant transmitted from air contamination and it has been influenced to person. The air contamination like Sulfur dioxide (SO_x), Carbon monoxide (CO), Nitrogen oxides (NO_x) are blended into the air making it harmful what's more, it uses for showering bug splash, pesticides like DDT, Ayurveda is an out of date clinical science and referenced air poison like *Atidhup savan*, *sheet-ushna parivartan* as causative segments of skin affliction including extreme touchiness, *Mukhdhushika*, *Vicharchika*, *Pama*. This evasion and the administrators of disease is the basic rule of Ayurveda for any sickness. Ayurveda suggested the *nidan parivarjan* for avoiding of such kind of disease causing and its irritating parts, After realization of *samsarjana karma Patolmooladikwath*, *Mustadichurna*, *Triphaladichurna*, *Madhavasava*, *Kanakabindvarista*, *Triphalasava*, Sulphur of mercury.

Key- words: Ayurveda, Environmental pollutants, Toxicity, skin Disease.

Article received on-27 August

Article send to reviewer on-1 Sept.

Article send back to author on-19 Sept.

Article again received after correction on -24 Sept.

Corresponding Author : Dr. Vandana chandel , P.G. scholar, P.G. Dept. Of Agad Tantra, NIA, Jaipur, Email, Id- drvandanachandel48@gmail.com

How to Cite the Article : Dr. Vandana chandel Dr. Anita Sharma and Dr. Seema Yadav, *Ayurveda* preventive measure for environmental toxicity induced skin disease and its management, IRJAY, September: 2020 Vol- 3, Issue-9; 328-337:. Doi: <https://doi.org/10.47223/IRJAY.2020.3923>

INTRODUCTION:

The Indigenous habitat a term is named "the biosphere", from Greek bios= life, sphaira=sphere is the layer of the planet earth where life exists. The biosphere is the worldwide biological systems incorporating every single living being and their connections incorporating their interactions with components of the lithosphere, geosphere, hydrosphere and climate. One of the best issue that the world is confronting today is that of natural contamination expanding with consistently. Only a model "In 2019, the Amazon rainforest(in brazil, bolivia, peru, paraguay) fierce blazes causes a ton of contamination for causing global warming.. Smoke from industrial facilities, vehicles or consuming of wood fundamentally happens because of coal consuming so it discharges Sulfur dioxide (SOx), carbon monoxide (CO),

Nitrogen oxides (NOx) into the air and making it dangerous. Hostile scents like H2S and Bright radiation , PAHs, VOCs, oxides , specific issue, ozone,cigarette smoke,etc. are reasons for natural poisonous quality. Presently a days, The unsafe concoction and engineered components turned into a basic piece of our life. These substances cause harms to our body just as our condition and demonstrate risky in one manner or other. Clinically, environmental toxicity may lead to Dermatitis, Allergic skin reaction, chalcogen acne ,chemical depigmentation, scleroderma like disease, skin cancer, Wrinkles. According to *Ayurveda* aspect of air pollutant - *Ati dhoop savan,ritu parivartan* as a causative factor of *Kustha,, vicharchika, Mukhdushika , pama,* and other disease.

AIMS & OBJECTIVE-

- 1) To collect, evaluate, elaborate and discussion of environmental toxicant induced skin disease eg.dermatitis
- 2) To give the *Ayurveda* treatment for prevention and management of environmental toxicant induced skin disease.

MATERIALS & METHODS-

This article is based on survey and clinical experiences on such type of disease. This material related to environmental toxicant and its dermatitis has been collected from various text books of modern sciences. The text book of *Ayurveda* and its commentary has been referred to understand the concern disease. The protocol for the preventive and management of environmental toxicant induced dermatitis has been made by using *Ayurveda* principles. This article depends on review and clinical encounters on such sort of malady. This material identified with natural toxicant and its dermatitis has been gathered from different course readings of present day sciences. The course book of *Ayurveda* and its editorial has been alluded to comprehend the worry illness. The convention for the preventive and the board

of ecological toxicant incited dermatitis has been made by utilizing *Ayurveda* standards.

Photodermatosis-¹

Illnesses that are either brought about by or exacerbated because of expanded affect ability to daylight are called photodermatosis.

Types-**Idiopathic photodermatoses-**

*Polymorphic light eruption*Juvenile spring eruption*Actinic prurigo*Solar urticaria *pseudoporphyria.

Metabolic photodermatoses-

*Prophyria cutanea tarda*Erythropoietic protoporphyria*erythropoietic porphyria *Veriegate porphyria.

Hereditary photodermatoses-

*Xeroderma pigmentosum disorder*Bloom syndrome*Rothmund -Thomson syndrome.

Photoexacerbated dermatoses-

*Lupuserythematosus*Acnerosacea*Psoriasis*choasma*Dermatomyositis*Pemphigus*Atopic dermatitis Pallagra.

Miscellaneous-

Different,* Liver/Spots/Lentigo senilis*Drug incited amiodarone, tetracycline.

The toxic actions can be divided into **acute (short-term)** effects and **chronic (long-term)** Effects²—

Acute health Effects-**Acute effects are:**

1. Irritation- rashes & dry skin
2. Dermatitis (acute)
3. Corrosivity- burns of skin tissue
4. Sensitization- allergic reactions causes anaphylactic shock
5. Metal fume fever

Chronic health effects-**Chronic Effects are-**

1. Cancer
2. Asbestosis
3. Mesothelioma
4. Silicosis
5. Occupational Hearing Loss
6. Cumulative Trauma Disorder.

Diagnosis of Skin disorder-³

Finding of Eczema-No lab test is expected to recognize atopic dermatitis (skin inflammation). Your primary care physician will probably make an analysis

by looking at your skin and assessing your clinical history. The person in question may likewise utilize fix testing or different tests to preclude other skin ailments or recognize conditions that go with your dermatitis.

Analysis of psoriasis – Two tests or assessments might be important to analyze psoriasis.

Physical test and clinical history- Your PCP as a rule can analyze psoriasis by taking your clinical history and looking at your skin, scalp and nails.

Skin biopsy- Once in a while, your PCP may take a little example of skin (biopsy). The individual in question will probably first apply a nearby sedative. The example is inspected under a magnifying lens to decide the specific sort of psoriasis and to preclude other disorders.

Diagnosis of Acne -**Grade of Acne⁴-**

When diagnosing skin inflammation, dermatologists order it into four evaluations. They assess the kinds of comedones (pimples) present, measure of irritation present, breakout seriousness,

how across the board the skin break out is and what territories of the body are influenced. Evaluations of skin break out are delegated follows:

Grade I: The mildest type of skin inflammation is alluded to as evaluation I. With grade I skin break out (gentle skin inflammation) the skin will show clogged pores, whiteheads or milia, and every so often minor pimples. There is no irritation (negligible redness, growing, or delicacy). Evaluation I skin break out can for the most part be cleared with over-the-counter medications.

Grade II: Evaluation II skin inflammation is viewed as moderate skin break out. A more prominent number of clogged pores and whiteheads are available on the skin than with grade I. Papules and Pustules (whiteheads) are all the more as often as possible found. Evaluation II skin break out may likewise be treated with over-the-counter items. Nonetheless, if there is no improvement following six to about two months, counsel your primary care physician.

Grade III: Evaluation III skin break out is viewed as moderate to serious skin break out. The distinction between Evaluation II

and Grade III skin inflammation is the measure of irritation present. Papules and pustules will be progressively various and there will be a more noteworthy measure of redness and aggravation found on the skin. Knobs are regularly present. This sort of skin break out ought to be assessed by your dermatologist, as it tends to be both agonizing and desert scars.

Grade IV: Evaluation IV skin break out is the most extreme evaluation of skin inflammation. With grade IV skin break out the skin will show numerous pustules, knobs, and sores. Pimples and whiteheads are generally various. There is articulated aggravation, and breakouts likely stretch out to regions other than the face, for example, the neck, upper chest, and back. Evaluation IV skin break out, additionally called cystic skin breakouts must be treated by a dermatologist.

Prevention of Environmental toxicity⁻⁵

The control of air contamination is at last a designing issue. The WHO has suggested the accompanying techniques for the anticipation and control of air contamination: -

(a) Containment: - That is, avoidance of break of dangerous substances into the surrounding air. Control can be accomplished by an assortment of building techniques, for example, walled in area, ventilation and air cleaning.

(b) Replacement: - That is, supplanting a mechanical procedure causing air contamination, by another procedure that doesn't Expanded utilization of power, petroleum gas and focal warming instead of coal has extraordinarily helped in smoke decrease.

(c) Dilution: - Dilution is legitimate inasmuch as it is inside oneself cleaning limit of the earth. For instance, some air

poisons are promptly evacuated by vegetation.

(d) Legislation: - Air contamination is controlled in numerous nations by reasonable enactment e.g. Clean Air Acts.

(e) International activity:- To manage air contamination on an overall scale, the who has built up a universal system of research centers for the observing .

The relatives of the patient of ominously powerless bronchitis should be build up the green verdant plants in their shade's in this way that the buildup should be kept up a key good ways from come in the room and patients will get a great deal of oxygen which is required

Ayurveda Aspect of air pollutant (Ati dhup savan ,shit ushna paripartan^{6,7}) abrasive dust as a causative factor of skin Disease -

Sr. No	Disease	Charka	Shusruta
1.	<i>Kushta^{8,9}</i>	+	+
2.	<i>Mukhdhushika¹⁰</i>	-	+
3.	<i>Vicharchika^{11,12}</i>	+	+
4.	<i>Pama^{13,14}</i>	+	+

Management of Environmental Toxicant induces skin Management to according Ayurveda¹⁵-

Ayurveda treatment is helpful for instances of constant presentation of ecological poisonous quality -

A)Nidana parivarjana - This implies shirking of etiological components like *Mithya Aahara-Vihar and Viruddhahara*, *Nidana Parivarjana* stops the further movement of the sickness, by confining vitiation of *Dosh*. Henceforth primary target of treatment is to improve metabolic exercises in *Dhatu* level, to redress *Srotas avarodha* and to give sustenance to drained *Dhatu*.

B) Sanshodhana chikitsa:- *Kusta* ruled by *Vata* is administration with home grown ghee internal. *Kusta* commanded by *Kapha* is given *Vamana karma* *Kusta* ruled by *Pitta* is given *Virechana karma* and *Rakotamokshana*.¹⁶

a)Vaman- Upper piece of body the *Vamanakarma* comprise of *Kutaj, Madanphala, Madhuk, Patol, Neem*.

b)Virechana-Swetnishoth, *Dantimool, Triphala* for this purgation.

c) Raktamoshan- Prachan

Raktamokshana blood – letting is finished with a coarse gadget if there should be an occurrence of *Kusth* with mellow manifestations.

Siravyadha Raktamoshana- vein cut is controlled in progressively intense stage.

d) Basti

e)Nasya- For *Nasya* medication arrangement following fixings are utilized: *-Saindhava, Danti, Maricha, Pippali, Karanja*.

f)Dhumpana- Virechanic Dhumpana.

g)Kshar karma

3) Sanshamna chikitsa:-

a)Bahirparimajana:-*lepa, parlep, pardeh, tel, snan.*

1.Lepa-Chitrakadi lepa, Trapuadi lepa, Shireesha twadagi lepa.

2. *Taila-Kushtadi taila, Shveta karaviradya taila, Shveta karavirapallavadya taila, Kanakaksheeri taila.*

3. *Alepana-glue of Priyangu, Hareuka, Fruits of Vatsaka, Ativisha, Sryya, Chandana, Katurohnini.*

b) Antahparimarjana-Tikta-rasa-
pardhan- Aushdhi- -Patolmooladikwath, Mustadichurna, Triphaladichurna, Madhavasava, Kanakabindvarista, Triphalasava, Sulphur of mercury.

CONCLUSIONS-

Significant air contaminations with impacts on the skin incorporate the sun powered UVR, PAHs, VOCs, NO_x, PM, O₃, and tobacco smoke. Extensive impacts interceded via air poisons on the human skin may add to skin maturing, atopic dermatitis, skin malignant growth,

psoriasis, and acne. Oxides have been related with expanded predominance of atopic dermatitis just as intensifications of the infection in youngsters. VOCs, with the nearness of daylight and NO_x, cause the development of photochemical oxidant items - basically O₃ at ground level, additionally called summer photochemical exhaust cloud. Presentation to O₃ has been related with urticaria, skin inflammation, contact dermatitis, and other vague emissions. Introduction to PM adds to outward skin maturing -wrinkles, pigmented macules or papules. Besides, it has been related with skin disease (SCC, BCC), psoriasis, skin inflammation and acne vulgaris. On the other hand contaminations (i.e. O₃, NO₂, and SO₂) and dissipating particulates mists and residue in the troposphere decrease the impacts of shorter frequency UVR and huge decreases in UV irradiance have been seen in dirtied, urban zones.

Acknowledgement:- Nil

Financial Assistant:- Nil

Conflict of interest :- Nil

REFERENCES

1. Arvind Arora; self Assessment and review of short subjects;*skin*psychiatry*Anaesthesia*Radiology; Pulse publications, chhatrasangh chauraha,Gorakhpur.page no-65.
2. Toxic Health Hazards in construction- acute and chronic health effect ;toolboxtalks.coffeecup.com
3. Mayoclinic.org.eczema/diagnosis-treatment/drc-20353279;at 29/03/2019
4. By Angela palmer;verywellhealth.com/diagnosis-acne-15760 at29/03/2019
5. PARKS Text book of preventive and social medicine,(2013),M/s BANARSIDAS BHANOT publishers,JABALPUR,22 Edition,pg no-80.
6. Ambika data shastri, Sushrut Samhita of Maharshi Sushurut, Frist part, Chaukhamba Sanskrit Sansthan Varanshi(2012), nidhan sthan 5/3, pg no-319.
7. Kashinatha Shastri,Dr.Gorakha-natha Chaturvedi,charaksamhita of agnivesha,Volume 2, Chaukhamba Sanskrit,Sansthan,Varanashi(2012),Chikitsa sthan 7/4-8, pg no-247.
8. Kashinatha Shastri,Dr.Gorakha-natha Chaturvedi,charaksamhita of agnivesha,Volume 2, Chaukhamba Sanskrit,Sansthan,Varanashi(2012),Chikitsa sthan 7/4-8, pg no-247.
9. Ambika data shastri,Sushrut Samhita of Maharshi Sushurut, Frist part , Chaukhamba Sanskrit Sansthan Varanshi(2012),nidhan sthan 5/1-2, pg no-319
10. Ambika data shastri, Sushrut Samhita of Maharshi Sushurut,Frist part, Chaukhamba Sanskrit Sansthan Varanshi(2012), nidhan sthan 13/38, pg no-372.
11. Kashinatha Shastri,Dr.Gorakha-natha Chaturvedi,charaksamhita of agnivesha,Volume 2, Chaukhamba Sanskrit,Sansthan,Varanashi(2012) Chikitsa sthan 7/26,),pg no-252.
12. Ambika data shastri,Sushrut Samhita of Maharshi Sushurut,Frist part, Chaukhamba Sanskrit Sansthan Varanshi(2012), nidhan sthan 5/13, pg no-322.
13. Kashinatha Shastri, Dr. Gorakha-natha Chaturvedi,charaksamhita of agnivesha,Volume 2, Chaukhamba Sanskrit,Sansthan,Varanashi(2012),Chikitsa sthan 7/25, pg no-252.
14. Ambika data shastri,Sushrut Samhita of Maharshi Sushurut, Frist part Chaukhamba Sanskrit Sansthan Varanshi(2012 nidhan sthan 5/14,),pg no-322.

15. Kashinatha Shastri, Dr. Gorakha-natha Chaturvedi, charaksamhita of agnivesha, Volume 2, Chaukhamba Sanskrit, Sansthan, Varanashi(2012) Chikitsa sthan 7/39, ,pg no-255.
16. Kashinatha Shastri, Dr. Gorakha-natha Chaturvedi, charaksamhita of agnivesha, Volume 2, Chaukhamba Sanskrit, Sansthan, Varanashi(2012), Chikitsa sthan 7/39, pg no-255.

