

Review Article

Contact Dermatitis and Its Homeopathic Management

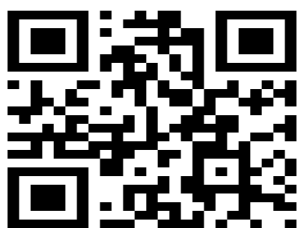
Sapana Purushottam Mangam* and Vaishali Lakhotia

Guru Mishri Homoeopathic Medical College & PG Institute, Shelgaon, Jalna

ABSTRACT

Contact dermatitis is an inflammatory skin disease. Contact dermatitis occur due to irritant like alkalis or acids and common allergens are metals(nickel), leather(chrome) Industrial chemicals, plastic(formaldehyde). Symptoms of contact dermatitis are itching, dry skin, a red rash, blisters, bumps and swelling. Contact dermatitis isn't contagious or life-threatening, but it can be very uncomfortable skin disease. Dermatitis occurs by contact with an external agent like metals, leather etc due to this direct irritant effect on the skin this is may be an irritant contact dermatitis or due to delayed, type IV hypersensitive reaction may be an allergic contact dermatitis. The majority of cases of contact dermatitis are self-limited and managed with simple supportive measures. But in chronic disorder of some patients can significantly affect the quality of life.

Keywords: Dermatitis, Contact, irritant, allergen, management, Homeopathy



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Address for Correspondence:

Dr. Sapana Purushottam Mangam

Department of Homoeopathic Materia Medica

Guru Mishri Homoeopathic Medical College & PG

Institute, Shelgaon, Jalna

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INTRODUCTION

Contact dermatitis is the most common occupational disease in many countries. more than 35% of all occupationally related disorder are skin diseases. Contact dermatitis is defined as a reactive eczematous inflammation of the skin which occurs after the direct contact with a chemical but occasionally by biologic or physical agents.¹ Contact dermatitis is divided into two major categories irritant contact dermatitis and allergic contact dermatitis. Causes of contact irritant dermatitis may be irritation from direct exposure to a substance, and an exposure to allergic substance may be allergic contact dermatitis (ACD).²

Epidemiology:

Contact irritant dermatitis – Infants, elderly female, and individuals with atopic tendencies are more susceptible to contact irritation dermatitis. Mostly occupational skin diseases are contact irritation dermatitis.²

Contact allergic dermatitis: Mostly women are develop contact dermatitis because regular contact with soap,spices, detergent and uses of artificial jewellery.²

Etiology:

Contact irritant dermatitis - Is a most common acute disease caused by many chemicals in undiluted form such as hydrochloric acid, hydrofluoric acid, alkalilysol etc.³

Common material that may irritate skin are –

Hair dyes⁴

Detergent, Soap

Shampoo

Pesticides, insect killers

Cement⁴

Long term exposure to wet diapers

Cumulative contact irritant dermatitis could be a chronic type due to repetitive contact with detergent or soaps or spices or vegetables or fruits juices. mostly seen in housewives³.

Contact allergic dermatitis - this form of

condition occurs when exposure to allergic substance that cause have allergic reaction.

Common allergens are-

Antibiotics (penicillin neomycin)

Cosmetics nail polish

Artificial jewellery

Fragrance in perfumes, soap

White metallic substance (nickel,)

Rubber additives

Fabrics and clothing

After exposure to allergic substance Contact allergic dermatitis begins within 24–48 h.

Photoallergic contact dermatitis –

Some products cause a reaction when the skin is exposed to sunlight

Sunscreen

shaving lotions

Some perfumes

Occasionally Contact allergic dermatitis can be caused by airborne allergens e.g. Industrial dust or pollens.³

Histopathology: Contact irritant dermatitis presents: mild spongiosis, epidermal cell necrosis, and neutrophilic infiltration of the epidermis².

Allergic contact dermatitis presents: dermal inflammatory infiltrates predominately contain lymphocytes and other mononuclear cells.

Pathophysiology-Contact irritant dermatitis: After exposure to irritant of chemical stimuli occur, skin inflammation arising from release of inflammatory cytokines from Keratocynelocal . Mainly cause are skin barrier disruption epidermal cellular changes and cytokine release.²

Allergic contact dermatitis is a type IV (cell mediated) delayed hypersensitivity reaction to a plethora of antigens in the environment. This antigen is processed by epidermal Langerhans cells, then T lymphocytes interact with Langerhans' cell processed antigen. Later on, skin damage arising from release of lymphokine from T cell lymphocytes.

Photo contact dermatitis: Photo contact dermatitis occur because in the presence of light an allergen becomes irritant.

Clinical presentation -

Contact irritant dermatitis: in acute condition of ICD is manifested by redness, burning and itching of affected skin. After itching

followed in minutes to hour by erythema, vesicles oedema, pustules or bullae. Affected skin is reddish brown discoloration may occur.

In Chronic contact irritant dermatitis skin of palms and fingers become affected. dry rough thick erythematous and scaly skin occur in chronic condition and later on Fissures may occur.³

Contact allergic dermatitis – In CAD skin of Dorsa of fingers and hands are affected more than palmar aspects.

In Contact allergic dermatitis due to airborne allergens involve the exposed parts are (face, distal extremities) and flexures(axillae).³

After exposure to allergen CAD may begin within 24–48 hrs. Redness, itching and scaling of the skin occur at affected site, but very frequently involvement of the eyelids occurs. Vesiculation and oozing of the affected part may occur later^{3,4}

Diagnosis-Taking detailed history including occupation, hobbies, physical examination, any topical or oral medication are essential for diagnosis .Contact allergic dermatitis can be confirmed with patch test. A measured amount Suspected allergens are applied to patient's back, and read the reaction after 48 hours. Positive test is indicated if edematous papules or vesicle occurring at the site of application of patch.^{2,3}

Prevention-

Avoid contactant and allergen³

Change of job or method of work for prevention of occupational contact dermatitis³

Use of protective wear gloves or cloths for avoidance of contact of allergens⁵

Self-care: Immediately After exposure to a known allergens or irritant wash with soap and cool water to remove the offending substance.⁵

Open cold compress relieves pain and reduce oedema during the acute phase of inflammation. Lemon juice vinegar can be used to dermatitis caused by exposure to basic irritants phenol etc.²

Avoid scratching⁵

Homeopathic management-

There are so many remedies for contact dermatitis. Homeopathic medicine selected

after understanding the physical and mental constitution, genetic predisposition, miasmatic background, peculiar symptoms, family history and causative factors in a patient. Homeopathic medicine treats the person as a whole.

Primary remedies are–

Sulphur- This remedy is the greatest general Psoric remedy for every kind of itch sore and ulcer. Helpful in burning, itching dry skin rough scaly, voluptuous itching get relief by after scratching. Chapping skin after being wet. Worse after scratching and washing. Suited those people who are weak and thin, even with good appetite, egotistic, religious, selfish, have grieving ideas, sadness and disgust life.^{6,7,8}

Arsenic album- Burning with restlessness and hot itching in the skin. Desquamation skin of the body, skin dry, rough, worse cold and after scratching. Reddish or bluish skin. People who need this remedy are usually restlessness, desperately angry, irritability, anxious, fear of death, anguish.^{6,7,8}

Ignatia –Itching all over the body relief by scratching, Excoriation skin, great sensitiveness of skin to draught of air. Easily frightened, impatience, discontented, humour, grief, despair about recovery, weeping disposition. Anger followed by silent grief and sorrow, timidity. brooding, disappointment.^{6,7,8}

Rhus tox – Burning and itching in rashes of the skin. itching relief by scratching. blisters are circular in form, spreading with red edge in advance edge be black. Burning skin after scratching. Humidity of skin, thickening of skin. This remedy needs those people who are anxious, sadness, restlessness with continued change of position fear of being poisoning, fear of death irritability. Burning in eczematous eruptions with tendency to scale formation.

Graphitis – This remedy is an anti-psoric remedy especially acts those patients who are fat chilly fair complexion with tendency to skin affection. Dryness of skin, red spot on the skin, humid or scabby eruption, violent itching and excoriation and rough hard of skin. sticky exudation. Burning and shooting pain. This remedy is suited to those persons who have tendency to put on

unhealthy fat. Sadness, weeping disposition, unhappy, grief anxiety about the future. Easily frightened, music makes aggravation.^{6,7,8}

Petroleum – Itching and excoriated skin, brown and yellow patches, itching and burning of eruption with dry or moist. Sore, sensitive and rough skin, hard to heal, cracks skin bleed easily irritability of skin and mind. This remedy of disposition is low spirited Anxious, sadness, fearful, violent angry at trifles,^{6,7,8}

Calcarea Carb – Humid and scabby eruptions. Itching all over the body. Burning, itching, smarting and excoriating skin. Unhealthy skin. Skin are dry and rough as if covered with military eruption. Impatience, easily impressionable and frightened, timid, anxiety about future. Insecurity feeling, want support. W

Worse from mental and physical exertion.

Conclusion- The morphology of the tissues, the histology, and immunologic findings are all used in diagnosis of contact dermatitis. Avoidance of suspected allergens is necessary for prevention of contact dermatitis. after exposure to allergens or irritant thoroughly wash with soap and cool water, but if rashes continue to spread after 2 to 3 days of self-care, and irritation or pain is severe then the patient needs to treatment. Advantage of homeopathic treatment in contact dermatitis is includes low cost, easy administration and reduction in topical steroid use.

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