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A Brief Study of Urticarial Eruption

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ABSTRACT

Background of study-

The word urticaria was first employed by the Scottish physician William Cullen in 1769. Many cultures have mentioned urticaria and also the disorder has had many terms.Urticaria (nettle rash) hives is so common disorder that even a lay person can recognize it with case.The characteristic lesion is a wheal that raises in the size from papule(few millimetres) to large irregular Plaque, Pink Or White, Firm Raised And Itchy. Urticaria Can Be Defined As A Skin eruption or lesion consisting of a wheal-and-flare reaction where the localized intracutaneous edema (wheal) is surrounded by a portion of redness (erythema) that's typically causes itching. To cure urticaria basically patho-physiology should be understood and with the help of homoeopathic principles by along using repertory and knowledge of posology cure could be attained .

Key words- Urticaria , Posology , Pathogenesis , Labrocyte , Dermographism , Corneum , Serpiginous

Introduction

Skin is the mirror of sick economy, skin or derma is the outermost fibroblastic coating of every living organism, which envelops its entire physical intrument , ie body.It is a dynamic organ composed of ectodermal (epidermis) and mesodermal (dermis) and hypodermis components. Urticaria (nettle rash) hives is so common disorder that even a lay person can recognize it with case.The characteristic lesion is a wheal that raises in the size from papule(few millimetres) to large irregular plaque, pink or white, firm raised and itchy. In about 50% of patients urticaria occur alone ,in about 40% of patients urticaria occur with angioedema and in about 10% angioedma occur alone ,urticaria became common diseas at present scenario. Skin diseases have been easily treated by homoeopathic medicines for long time without any side effects and good results with the help of cardinal principles.The use of external application should be avoided.

To cure urticaria basically patho-physiology should be understood and with the help of homoeopathic principles by along using repertory and knowledge of posology cure could be attained . Urticaria can be defined as a skin eruption or lesion consisting of a wheal-and-flare reaction where the localized intracutaneous edema (wheal) is surrounded by a portion of redness (erythema) that's typically causes itching. Individual lesions last as briefly as haif an hour to as long as 36 hours.They'll be as small as a millimeter or 6–8 inches in diameter (giant urticaria). Weals , also called as 'nettle rash' or hives may be a transient, well-demarcated, superficial erythematous or pale swellings of the dermis, very itchy and are related to a surrounding red flare.

Angioedema is defined as a sudden, pronounced,swelling of the dermis and suncutis, it's sometimes painful and determination is slower than for wheals.

HISTORICAL BACKGROUND:

The word urticaria was first employed by the Scottish physician William Cullen in 1769. Many cultures have mentioned urticaria and also the disorder has had many terms.The earliest description of the disease is found in "The Yellow Emperor's Inner Classic",by Huang Di Nei Jing, written between 1000 BC and 200 BC . In 10th century B.C. it had been called 'Feng Yin Zheng' in China. In 4th century B.C., Hippocrates noted similarities between urticaria, stinging nettles, and bug bites and called the condition as'knidosis' (nettle rash). 'Uredo,' 'essera' (Arabic for elevation), 'urticatio' (derivedfrom the Latin urere; to burn), and 'scarlatina urticaria' have all been used.

In 18th century, urticaria was compared with the stinging and burning of a nettle (Urtica dioica).There are many myths and theories regarding the pathogenesis of urticaria are described – a humoral theory , a metereologic theory in, and a menstrual theory in 1864.

EPIDEMIOLOGY:

Urticaria affects 15%–20% of the population. Urticaria may be common problem, with a degree prevalence of 0.1%. Lifetime prevalence of chronic urticaria varies from 0.05% to 23.6% within the general population, but a variety of 1–5% seems more realistic. There's no racial variation within the incidence. Overall, urticaria is more common in women, with a female : male ratio ofroughly 2:1 for chronic urticaria. Urticaria affects people of all age groups, but usually those within the second and third decade of life.

An Indian study of 100 patients with urticaria found that 10% had urticaria because of only bacterial infection; 69%, because of worm infestation; 6%, drug induced; 3%, insect bites; 2%, cold urticaria; 4%, cholinergic urticaria; and three percentage, dermographism. Inhalants and food ,which are responsible in 35% and 25% cases respectively. In case of inhalants, 26% of cases were because of the pollen; 9%, fungi; and 10% due to house dust and buffalo dander. In 6% of the cases, no etiology could be detected. Among 500 cases of urticaria in another Indian study out of 100 patients 37% of the patients were suffering from physical urticaria, including 16.4% due to symptomatic dermographism; 10.8%,cholinergic urticaria; 8.4%, cold urticaria; 0.7%, solar urticaria; and 0.5%, both pressure and delayed cold urticaria.

PATHOPHYSIOLOGY :

The labrocyte is believed to be the most effector cell within most variety of urticaria , through other cell in additionally involved. Urticaria is because of local increase in permeability of capillaries and venule.These changes are dependent on activation of the cutaneous mast cells ,which contain a spread of mediator predominantly histamine.The masocytel respond with a lowered threshold of releasibility. Several immunologic and non immunologic factors trigger somatic cell degranulation and mediator release in vitro- and in vivo. Stimulation of cutaneous labrocyte by the binding of antigen to the actual surface bound igE antibodies may end in an direct wheal and flare reaction and in late phase reaction after a on the spot response to antigen within the skin ,the late phase reaction slowely develops at the antigen challenge site. It encompass of burning ,pruritis,erythema and induration that peak AT 6-8 hours, and typically resolve by 24 to 48 hours.

Histologically: late phase reaction characterized initially by vasodilation and a perivascular infiltrate consisting preliminary of neutrophil and esinophils with scattered mononuclear cells. This PMN-cell-rich process occurs for minimum 24 hours and after 48 hrs it's replaced byaCD4 (helper/inducer)T-lymphocyte reaction.

Classification of Urticaria:

ACUTE URTICARIA : These are hives which last less than 6 weeks the most common causes are certain foods,medication,or infections insect bite and internal diseases may be responsible. Drugs can elicit acute urticaria both as allergens(eg.pencilin) and a pseudo allergens (eg.NSAIDs)

CHRONIC URTICARIA: Chronic urticaria is urticaria during which there are daily or episodes of weals or angioedema that it;s present for over 6 weeks. Chronic urticaria could also be spontaneous or inducible. Both type may co-exist .

CHRONIC INDUCIBLE URTICARIA :

COLD URTICARIA: it's a disorder were hives or large red welt form over the skin after exposure to cold stimulus. It's more frequently affect in women than in men overwhelming majority of patients with cold urticaria , the diseases is idiopathic.

HEAT URTICARIA: Heat urticaria different from cholinergic urticaria. Which is elicited by an increases within the body core tempture, may be a rare sort of physical urticaria induced by direct contact of the skin with warm object or warm air the eliciting tempeture range from 38 degree c.

SOLAR URTICARIA: It could be a rare condition where itching, erythema and wheals appear rapidly within minutes in areas of sun exposure and disappear within an hour after exposure ceases. SU is broadly divided into primary solar urticaria (PSU), where no other factors that may secondarily sensitize to sunlight are detected, and secondary solar urticaria (SSU). There also special form of solar urticaria.

Primary Solar Urticaria

Secondary Solar Urticaria

Fixed Solar Urticaria

delayed Solar Urticaria

-DELAYED PRESSURE URTICARIA: The swelling of delayed pressure urticaria (DPU) takes place within haif an hour to 12 hours after pressure and is usually pruritic and painful, and persists for 12 to 72 hours. Lesions appear at the positioning of tight clothing. The diagnosis of DPU: keeping standardized weights on defined areas for specified times and looking ahead to a palpable wheal locally two to eight hours later.

-VIBRATORY ANGIO-EDEMA : Any vibratory stimulus like as jogging, vigorous towelling or using lawnmowers induces a localized, red, itchy swelling within minutes and lasting but some hours.

-CHOLENERGIC URTICARIA: Here a selected physical stimulus induces reproducible wealing. Cholinergicurticaria occurs in response to sweating caused by rise in core temperature. Wealing caused by physical stimuli occurs within minutes and persists for fewer than 30–60 mns

DERMOGRAPHISM: This involves the triple response which can arise from firm stroking of the skin - local erythema because of capillary vasodilatation, followed by oedema and a surrounding flare due to axon reflex-induced dilatation of arterioles. There's rapid appearance of a linear wheal with flare at the location where a brisk and firm stroke is created with a firm object.

Immediate dermographism is assesed into two major forms: simple and symptomatic. Simple immediate dermographism is seen in 5% of normal people and should be considered as an exaggerated physiological response. Symptomatic dermographism is the the commonest of the physical uricarias and also the patients, most often young adults, complain of pruritus before the wheals appear.

-AQUAGENIC URTICARIA: This is often rare style of urticaria have to be differentiated from contact urticaria thanks to that proven fact that water isn't itself the causative agent, but probably liberate a water- soluble allergen from the corneum, which then acts as an allergen. The disease is five times more frequent in female than male. The lesion resembles those of cholinergic urticaira with mostly pin-sized wheal on the trunk.

CLINICAL FEATURES

Itchy, erythematous pale to pink, oedematous, raised areas of the skin are present with a surrounding red flare. They occur anywhere on the body,in variable numbers and sizes, starting from some millimetres to large lesions, of varying shapes including rounded, annular, serpiginous and bizarre patterns.

Weals last some hours and resolve within 24 hr leaving the skin with a traditional appearance. These are generally very itchy and Patients tend to rub instead of scratch, so excoriation marks are unusual, but occasionally bruising may result, which can be seen particularly on thighs.

Weals is also more pronounced within evenings or premenstrually. There is also associated angio-oedema in 50% of patients with ordinary urticaria. Urticaria is also realted to systemic symptoms of malaise, loss of concentration, low mood, feeling hot and cold, headache, abdominal pain or diarrhoea.

INVESTIGATIONS Initial work up History taking:

Time of onset (time of day, time of year)

Duration of urticaria (acute or chronic)

Duration of individual lesion

Enquiry for food, food additives, drugs, infection

Enquiry for home and work environment

Family history of thyroid and other autoimmune diseases

History of atopy

History of dental diseases Physical examination:

Morphology of lesion (small papules, plaques, combination oflesions, thickness of lesions).

Distribution (localized, generalized, sun exposed skin, other sites).

Tests for physical urticarias (stroke, exercise, ice cube test) Features of systemic involvement (fever, arthralgia).

Clinical evidence of any infection (dental caries, periodontal disease, sinusitis, cystitis, vaginitis

References:

1.Skin, mirror of a sick economy: Dr.kasim chimnthanawala p:1,62-65

2. Grattan CEH. Towards rationalizing the nomenclature and classification of urticaria: some guidance on guidelines. Clin Exp Allergy 2007; 37: 623–6.

3.Johansson SGO, Bieber T, Dahl R et al. A revised nomenclature for allergy for globaluse: Report of the Nomenclature Review Committee of the World Allergy Organization. J Allergy Clin Immunol 2004; 113: 832–6.

4.Rook AJ. The historical background. In: Warin RP, Champion RH, eds. Urticaria. London: Saunders, 1974: 1–2.

5. Czarnetzki BM. The history of urticaria. Int J Dermatol 1989; 28: 52–7

6.. Hui SD, Fen WX, Wang N. Manual of dermatology in Chinese Medicine. Eastland Press: Seattle; 1995. p. 204–13

7.Singh H, Minocha YC, Sood VK. Etiological spectrum of urticaria. Indian J Dermatol Venereol Leprol. 1989;55:173–6

8.. O'Donnell BF, Neill CM, Francis DM et al. Human leucocyte antigen class II associations in chronic urticaria. Br J Dermatol 1999; 140: 853–8.

9.current advance in the management of urticaria-arch immunol Ther Exp-2008-56:103-14.

10.Frew AJ Kay AB.Eosinophils and T-lymphocytes in late-phase allergic reaction.JAllergy clin immunol 19900 ,85:533-9

11.Classification , diagnosis approach to treatment of angioedema,cold urticaria-Feinberg,Jeff H and Charles B.Tone,suscessfull treatment of disabling cholinergic urticaria.military medicine, vol-173 pg-217-220

12. Illig L. Physical urticaria: its diagnosis and treatment. In: Mali JWH, ed. Current Problems in Dermatology, Vol. 5. Basle: Karger, 1973: 79–116.

13.Kobza Black A. The physical urticarias. In: Champion RH, Greaves MW, Kobza Black A et al., eds. The Urticarias. Edinburgh: Churchill Livingstone, 1985: 168–90

14.Caliskaner Z, Karaayvaz M, Ozturk S. Recurrent urticaria lesions in a heparin-allergicmpatient: most likely another form of "recall urticaria". J Invest Allergol Clin Immunol. 2005;15:78–8

15.Champion RH. Acute and chronic urticaria. Semin Dermatol. 1987;6:286–91.

16.Habif TP. Clinical dermatology – a color guide to diagnosis and therapy. 4th ed. Philadelphia: Mosby; 2004. p. 129–61

17.Hawelia D. Investigations. In: Ghosh S, editor. Urticaria update. Kolkata: IAISD; 2005. p. 48–52. 18. Ghosh SK. Management. In: Ghosh S, editor. Urticaria update.