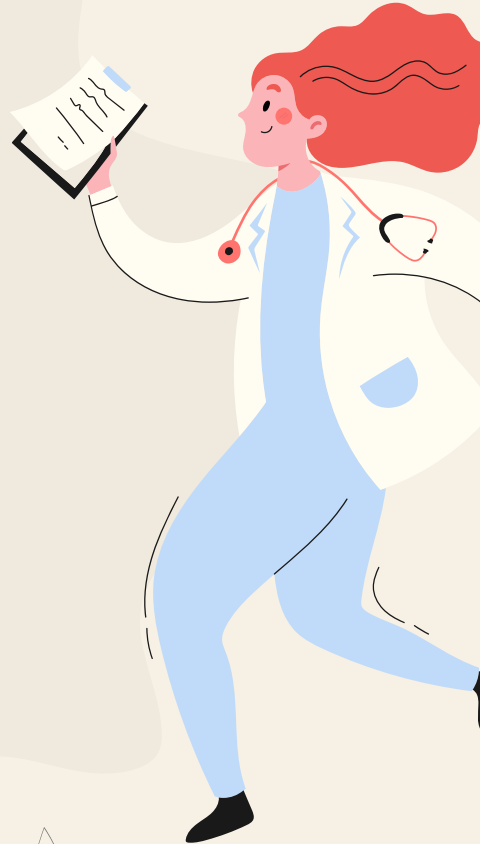


Pruritus

Halema Khraisat



Definition

- Itching of the skin, unpleasant sensation that triggers rubbing or scratching.
- May be:
 1. localized or generalized
 2. May be with or without skin changes.
 3. Acute or chronic



Mechanism

1. Skin comes in contact with the allergens or irritating substances
2. Irritation and inflammation of epidermal nerve endings (unmyelinated C, type A delta nociceptive)
3. Release of **histamine**
4. More itching
5. More scratching
6. More damage and inflammation
7. Itch scratch cycle continues



Complications

● Skin injury

● Infections

● Scarring



Causes

- **WITH SKIN CHANGES:**

- A. LOCALIZED:

- eczema, psoriasis الصدفية
 - lichen planus الحزاز المسطح
 - dermatitis herpetiformis
 - insect bite/sting
 - head lice
 - contact dermatitis
 - polymorphic light eruption
 - urticaria/angioedema الشرى-الوذمة الوعائية
 - fungal infections
 - pruritis ani/vulva

- B. GENERALIZED:

- widespread eczema/psoriasis
 - scabies
 - allergic drug eruptions
 - graft vs host dss
 - pre-bullous pemphigoid
 - cutaneous lymphoma
 - body/pubic lice
 - viral exanthems
 - xerosis

- **WITH NORMAL SKIN:**

- A. ENDOCRINE: diabetes, myxedema, hyperthyroidism, pregnancy
- B. METABOLIC: hepatic failure, biliary obstruction, CKD
- C. HEMATOLOGICAL: polycythemia, IDA
- D. MALIGNANCY: lymphoma, leukemia, myeloma, carcinomatosis
- E. NEUROLOGICAL / PSYCHOLOGICAL: neuropathic pruritus, multiple sclerosis, anxiety
- F. INFECTION: filariasis, HIV
- G. DRUGS: opioids

CAUSES OF ITCHY SKIN



Dry Skin



Eczema



Psoriasis



Dandruff



Lice/Scabies



Allergic Reactions



Skin Irritants



Hormonal Changes



Excessive Sweat



Fungal Infection



Insect Bite



Anxiety & Stress



Sunburn



Nerve Disorders



Chronic Diseases



Pregnancy

Other causes: Superficial skin infections (folliculitis & impetigo), hair regrowth, healing wounds, & nutritional deficiencies

Chronic Pruritus

Physical Exam

Primary rash that precedes itch
+/- evidence of chronic scratching

Itch without rash +/-
evidence of chronic scratching

Dermatologic

- AD
- Psoriasis
- Urticaria
- Lichen planus

Non-Dermatologic

History of spinal injury, back pain, or herpes

History of psychiatric disorders

Constitutional symptoms or no additional history

Neuropathic

- BRP
- Notalgia paresthetica
- Post-herpetic itch

Psychogenic

- OCD
- Folie a deux
- Depression

- CBC and differential
- Chest X-ray
- Creatinine level
- LFTs
- TSH
- ESR
- HIV serology
- Drug history

Systemic

- CKD
- Cholestasis
- Lymphoma
- HIV

CPUO

Approach

1

History collection

2

Physical examination, skin examination

3

Investigations

Table 1. Historical Findings That Suggest Etiologies for Pruritus

<i>Historical finding</i>	<i>Possible etiologies</i>
New cosmetics or creams	Allergic contact dermatitis, urticaria, photodermatitis
New medications, supplements, or illicit drugs	Urticaria, fixed drug eruptions
Recent travel	Pediculosis, scabies infestation, photodermatitis, urticaria
Hobby or occupational exposure to solvents, adhesives, cleaners	Irritant contact dermatitis, xerosis, atopic dermatitis, eczema
New animal exposures	Flea infestation, allergic contact dermatitis, urticaria
Sick contacts, especially those with febrile diseases and rashes	Rubeola, mumps, varicella, scarlet fever, cellulitis, fifth disease, folliculitis
Unexplained weight changes, menstrual irregularity, heat/cold intolerance	Thyroid disease with secondary urticaria or xerosis
Unexplained weight loss, night sweats, unexplained fevers, fatigue	Lymphoma with secondary generalized pruritus
Malaise, nausea, decreased urine output	Renal failure with generalized pruritus

- **INVESTIGATIONS:**

1. CBC
2. Iron
3. Thyroid function
4. Serum protein electrophoresis
5. HIV antibody
6. Urinalysis and stool
7. Chest X-ray
8. Skin biopsy

Management

- Identify & treat the underlying cause
- Avoid triggering factors
- Topical management
 - simple soothing **emollients** - menthol & calamine
 - topical local **anesthetics** – benzocaine, lidocaine, tetracaine
 - topical **antihistamines** – mepyramine, antazoline
- Oral anti-histamines – H1 or H2 blockers

THANK YOU