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Ichthyosis in Unani Medicine: A Comprehensive Review of Disorders of Cornification and their Modern Dermatological Correlates

Dr. Meenaz Fathima[1], Dr. Sheeraz Fathima[2]

[1]PG Scholar, Department of General Medicine, Govt Nizamia Tibbi College, Charminar, Hyderabad)
Corresponding Author Email: *drmeenazfathima1998[at]gmail.com*

[2]UG BUMS, Global Unani Medical College, Narsingi, Hyderabad

Abstract: ***Ichthyosis is a heterogeneous group of hereditary and acquired disorders of cornification, which is characterised by generalised dry, scaly skin that develops from impaired epidermal barrier function. The condition is derived from the Greek word ichthys, meaning fish, representing the characteristic fish-scale appearance of the skin. The prevalence of ichthyosis varies widely, with ichthyosis vulgaris affecting approximately 1 in 3, 000 individuals, while rare autosomal recessive congenital ichthyoses (ARCI) occur in nearly 1 in 300, 000 births and show higher prevalence in regions with consanguineous marriages, particularly in parts of South India. This article comprehensively discusses the classification, aetiology, pathophysiology, clinical features, diagnosis, and management of both inherited and acquired ichthyoses, with salient emphasis on corresponding modern molecular and genetic mechanisms with traditional Unani medical concepts. Inherited ichthyoses emerge due to mutations in genes responsible for epidermal protein and lipid synthesis, which results due to defective keratinocyte differentiation, abnormal desquamation, and compromised skin barrier integrity. Acquired ichthyosis is kindred with systemic conditions such as autoimmune disorders, endocrine abnormalities, malignancies, infections, nutritional deficiencies, and drug exposure. The Unani perspective represents ichthyosis as Jild ki khushki aur taqashur, attributed predominantly to abnormal black bile (Saudā-e-ghair-ṭabīʿī), pathological combustion (iḥtirāq), and excessive dryness (ghalba-e-yubūsat). A correlation is drawn between Unani concepts of defective quwwat-e-mughayyirah and the modern understanding of genetic and metabolic dysfunction influencing epidermal transformation. The article further outlines contemporary dermatological management strategies alongwith Unani principles of treatment, emphasizing detoxification, humoral balance, emollient therapy, and holistic patient care. This integrative approach highlights the importance of Unani medicine in understanding and managing ichthyosis in relation to modern medical science.***

Keywords: Ichthyosis, Amraz-e-Jild, Hyperkeratosis, Unani Medicine, Integrative dermatology.

1. Introduction

Ichthyosis is a group of skin conditions in which the skin becomes very dry and scaly all over the body, and it's essentially the same as having a damaged skin barrier with redness [1, 2]

Epidemiology

Inherited Ichthyoses Estimating the prevalence of inherited ichthyoses is challenging due to several factors. First, ichthyoses represent a group of distinct disorders, each with its own frequency, making it inappropriate to rely on a single overall prevalence estimate, as this would disproportionately reflect the more common forms. Second, there are more than 50 recognised types of inherited ichthyoses, most of which are classified as rare diseases, affecting fewer than 1 in 2, 000 individuals. This rarity significantly limits the availability of accurate and comprehensive epidemiological data. Furthermore, much of the existing data comes from specific populations or study cohorts, making it unclear how well these findings can be generalised to broader or more diverse populations. (3)

Acquired Ichthyosis Acquired ichthyosis is a rare dermatological condition that develops later in life and is not present at birth. Determining its prevalence is also difficult, as studies often use varying definitions of acquired ichthyosis, and the condition is frequently confused with xerosis (dry skin). Reported prevalence varies widely depending on the underlying cause. Studies suggest that acquired ichthyosis affects approximately 30% of individuals with AIDS, 22% of patients with diabetes, and up to 50% of those infected with HTLV-1. The condition is rarely observed in patients with cancer; however, when it does occur, it is most commonly associated with Hodgkin's lymphoma. (4, 5, 6, 7, 8)

Figure 1

The word ichthyosis actually derives from the Greek word ichthys, which means "fish. " This name definitely refers to how the skin looks like fish scales. These disorders are diseases of keratinisation itself, whether they are hereditary or acquired further. (9, 10)

Hereditary ichthyosis as per genetic studies, mutations in genes that make proteins and fats needed for skin cell development cause the typical changes seen in inherited forms of this condition. Regarding the effects, these mutations lead to abnormal appearance, tissue structure, and molecular patterns. The skin surely shows dry, rectangular

or plate-like scales of different thickness, often with redness. Moreover, patients face psychological stress due to visible lesions and social stigma.

Figure 2

Acquired ichthyosis basically develops the same way due to other health problems like autoimmune diseases, poor nutrition, and certain medicines. In bad cases, too much skin peeling actually blocks sweat glands, tear ducts, and ear canals. This definitely causes problems with sweating, dry eyes, and can even lead to permanent hearing loss. Basically, some types of ichthyoses have mutations that affect not just the skin but also the hair, genitourinary system, gastrointestinal tract, and nervous system-these are called syndromic ichthyoses, and they cause the same kind of problems in multiple body parts.

Unani medicine surely describes ichthyosis as "Jild ki khushki aur bhoosi ka utarna" and "Fasl qashf aur taqashur jildi, " which means too much skin dryness and rough skin that sheds scales like fish skin. Moreover, these conditions show the same signs that we see in ichthyosis today (ref 11, 12). This traditional description matches the clinical features known in modern dermatology, further emphasising dryness, scaling, and poor barrier function as main features of the disease itself.

2. Literature Review

Definition

The term ichthyosis is derived from the word 'ichthys', meaning fish and refers to the fish scale-like appearance of skin… (13)

The ichthyoses are a heterogeneous group of hereditary and acquired disorders of keratinization characterized by the presence of visible scales on the skin surface. (14). It is not one disease but a group of diseases in which the homeostatic mechanism of epidermal cell kinetics or differentiation is altered, resulting in the clinical appearance of scale. Because these disorders manifest as abnormal differentiation of the epidermis, the term disorders of cornification is preferred to ichthyosis. (15)

According to Unani Literature, ichthyosis (جلد کی خشکی, کا اترنا بھوسی, تقشر جلد, تقشّف جلد) is a skin condition in which the epidermal layer of the skin becomes Dry (خشک) and Rough (کُھرْدَری) (11)

In a few Unani books, it is referred to as Fish Skin مچھلی کےچھلکے, and in a few books, it is
[کی کھال سانھبر کھاس سفن] (12)

Etiology

Acquired Ichthyosis

Acquired forms can be caused by different underlying factors, such as malignancies, autoimmune diseases, nutritional disorders or medication (16)

The sudden onset of generalized pronounced ichthyoses in an adult could be due to:

1) Lymphomas, especially Hodgkin's lymphoma
2) Internal malignancy
3) Malabsorption syndromes and malnutrition
4) Certain drugs like clofazimine
5) Hypothyroidism
6) Lepromatous leprosy
7) HIV disease……. (17)

Inherited Ichthyosis

Inherited ichthyoses follow patterns of Mendelian inheritance, and each form is associated with a mutation in a specific gene that encodes a protein involved in the synthesis or metabolism of proteins or lipids that are important in keratinocyte terminal differentiation, leading to the observed phenotypic, histological and molecular abnormalities (17)

Unani Concept

۱۔ سودای خاطر کا غلبہ / رطوبات کا احتراق [Soudavi khilt ka galba / rutubat ka ehteraaq]
۲۔غلبہ یبوست [Jalba e yaboosat]
۳۔جسم پر کسی سخت چیز کا لگنا [Jism par kisi sakt cheez ka lagna] (18)

Classification

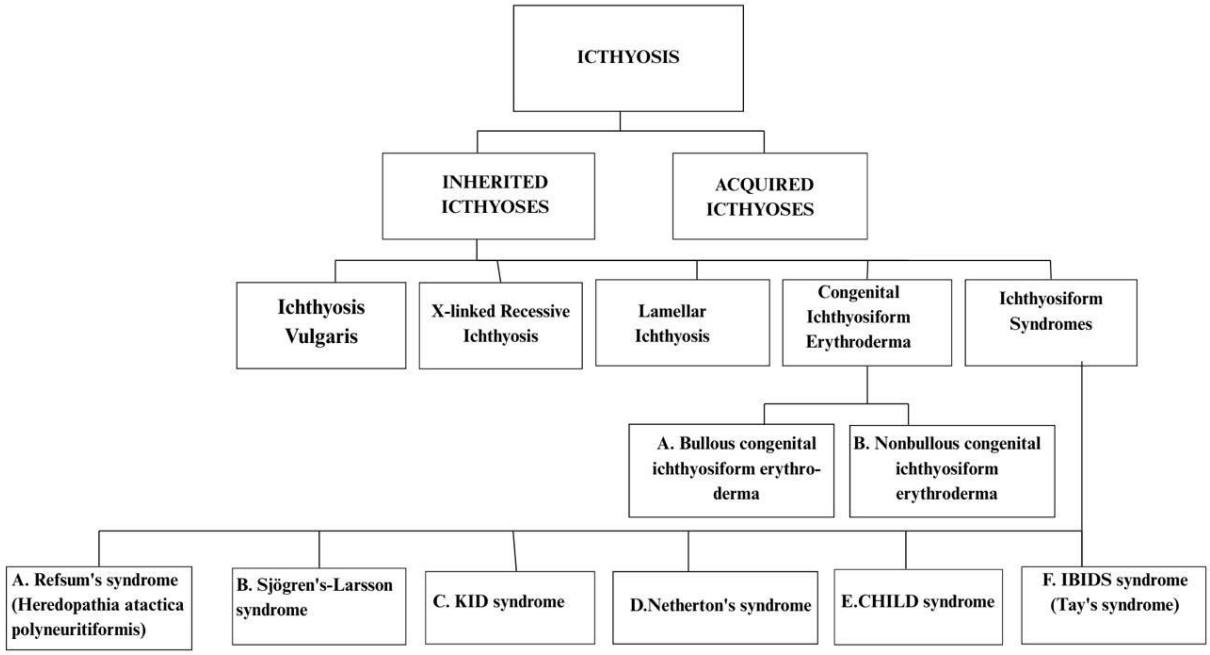


Table-1…… (10)

Pathophysiology

Inherited Ichthyoses

Inherited ichthyoses encode proteins that are involved in the synthesis or metabolism of other proteins and lipids that form the epidermal barrier. When these genes are mutated, the normal epithelial function is disrupted. Thus, ichthyoses can be classified not only phenotypically but also based on gene variant (19)

Ichthyosis Vulgaris

Although inherited as an autosomal dominant trait, two filaggrin (FLG) gene mutations are required for the full clinical IV phenotype. In one-third of patients who have only one FLG mutation, the phenotype is limited to accentuated palmar and plantar creases and somewhat dry skin. Filaggrin mutations result in impaired epidermal barrier formation and a marked reduction of natural moisturising factors, which play an important role in hydration of the stratum corneum and also predispose to atopic eczema. (20)

X-linked Recessive Ichthyosis

In 90% of cases the STS gene mutation is a deletion, which often spans the entire gene. High concentrations of cholesterol sulphate accumu-late, inhibiting proteases such as kallikrein 5 and kallikrein 7 that are important for normal degradation of corneodesmosomes. This, in turn, leads to decreased desquamation and, as a consequence, hyperkeratosis. (20)

Lamellar Ichthyosis

Deficiency of the enzyme transglutaminase-1 (TG1) is the most frequent cause of ARCI. TG-1 contributes to the assembly of the cornified envelope by catalysing calcium-dependent crosslinking of proteins, such as involucrin and loricrin. (20)

Congenital Ichthyoses

A. Bullous congenital ichthyosiform erythroderma

El is usually inherited as an autosomal dominant trait (occasionally autosomal recessive). It is due to mutations in KRTI or KRTI0 genes encoding epidermal keratins that are intermediate filaments, which contribute to the formation of the keratinocyte cell cytoskeleton. (20)

B. Non-Bullous congenital ichthyosiform erythroderma

Its Pathophysiology is the same as Lamellar Ichthyoses (20)

Ichthyosiform Syndromes

A. Refsum's Syndrome (Heredopathia atactica polyneuritiformis)

Refsum's syndrome is a rare autosomal recessive metabolic disorder. The underlying abnormality is a deficiency of the enzyme phytanic acid oxidase. As a consequence of this deficiency, phytanic acid (found in green vegetables) accumulates and displaces some of the unsaturated fatty acids, such as linolenic acid, from the lipids throughout the tissues. (10)

B. Sjögren's-Larsson syndrome:

This uncommon neuroectodermal genodermatosis appears to be inherited as an autosomal recessive disorder.

The underlying metabolic defect is a deficiency of the enzyme fatty alcohol: nicotinamide-adenine dinucleotide oxidoreductase. (10)

C. KID syndrome (10)

D. Netherton's syndrome:

Netherton's syndrome is due to mutations of SPINKS on chromosome 5q32214215 It is telomeric to the cytokine gene cluster at 5q31 2e

SPINKS encodes the lymphoepithelial-Kazal-type-related inhibitor.

(LEKTI), a serine protease inhibitor which has a crucial role in epidermal growth and differentiation. An immunohistochemical test for the presence of LEKTI in skin has been developed. It is absent in Netherton's syndrome 2. There is some correlation between the mutations and the phenotype. (14)

E. CHILD syndrome (10)

F. IBIDS syndrome (Tay's syndrome) (10)

ACQUIRED ICHTHYOSES
Ichthyosis has also been associated with malnutrition, sympathectomy, hypothyroidism, leprosy, HIV infection, HTLV-I infection, sarcoidosis, diabetes mellitus, eosinophilic fasciitis, and drugs such as clofazimine, nicotinic acid, etc

Many of the drugs interfere with lipid metabolism. (14)

UNANI CONCEPT
Unani understanding of ichthyosis is a skin condition with dry and scaly patches.

According to Unani medicine, ichthyosis develops when black bile (Sauda) itself becomes dominant and further mixes with abnormal moisture in the body. This extra moisture actually gets burned (Iheteraq) and dries up, definitely turning into something like ash. The body's natural force pushes the harmful matter further towards the outer skin itself, causing dryness, scaling, and skin thickening.

Basically, this happens when the tabī'at is strong and can push harmful things to the same, less important parts like the skin. When the body's natural power is actually weak, it definitely pushes bad matter towards important inner organs, which can cause serious diseases like malignancy. (11, 21)

MODERN CO-RELATION WITH UNANI CONCEPT
Correlation with Modern Pathophysiology

Inherited Ichthyoses
As has been said by Shaikh-ul-Raees Bu Ali Sina (Avicenna) شیخ الرئیس ابو علی سینا, every organ has, in accordance with its specific mizāj (temperament), a quwwat-e-mughayyirah (transformative faculty). This faculty brings changes to the ajzāʾ-e-ghizāʾī (nutritive components) and transforms them into a form suitable for the ʿuḍw-e-mutaghadhdhī (the organ being nourished).

Every part of the body continuously carries out varying degrees of taghayyur (alteration) and istiḥālah (protein & lipid metabolic transformation) throughout life, so that the benefits of the food become part of the body tissues, while the waste and harmful components are separated and eliminated.

If there is any defect in quwwat-e-mughayyirah (transformative faculty), this impacts istiḥālah (protein & lipid metabolic transformation), which can be correlated with genes that are mutated, as genes further build up proteins and lipids. (14, 21)

Acquired Ichthyoses

Saudā-e-Ghair-Ṭabīʿī (Abnormal Black Bile)
Saudā-e-ghair-ṭabīʿī refers to an abnormal form of black bile that is formed because of iḥtirāq (pathological combustion) of any of the humours, which might also arise from the combustion of normal saudā itself. This abnormal saudā does not provide normal taghziya (nutrition); rather, it leads to fasād (pathological condition) and gives rise to various saudāvi diseases. (21)
Saudāvat-e-Jild (Cutaneous Saudāvi Disorder) Saudāvat-e-jild is a condition in which there is an excessive accumulation of saudā below the skin. Due to this increased concentration of saudā, the skin becomes excessively dry, rough, and scaly. (21)

Clinical Features

Symptoms
Inherited Ichthyoses
- Findings are often mild.
- Dry, small, rectangular scales appear on the
- extensor extremities.
- The lower extremities, particularly the anterior shins, are often more noticeably affected
- Affected skin has the appearance of cracked
- pavement or fish scales.
- This condition characteristically spares the
- flexor surfaces.
- It is usually asymptomatic but may become pruritic or chapped in the winter.
- Palmar creases may be accentuated.
- Keratosis pilaris may also be present.
- Scaling rarely involves the entire curaneous surface.
- Scaling of the skin results from the retention of scale rather than increased proliferation.
- The condition may result from a defect in the synthesis of the epidermal proteins profilaggrin and filaggrin. (22)

Icthyoses Vulgaris

Figure 3

IV usually develops during the first months of life. Scaling may resolve or be reduced markedly in the summer due to seasonal variation and increased humidity. Individuals with IV present with light grey scales covering mainly the extensor surfaces of the extremities and the trunk The scales tend to be smaller than in recessive X-linked ichthyosis, and the groin and larger flexures are spared. Almost all IV patients exhibit hyperlinear palms, and this clinical feature is not influenced by factors such as season or humidity. Patients may report hypohidrosis and lack of tolerance to high temperatures. (20)

Recessive X-linked ichthyosis

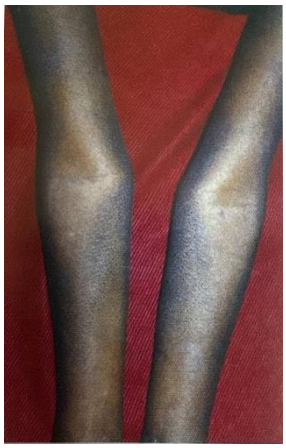


Figure 4

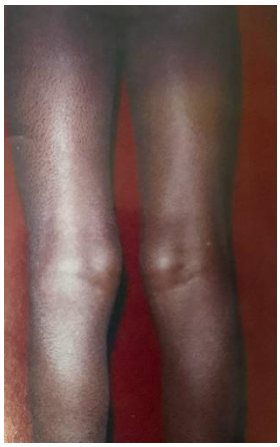


Figure 5

(Fig-4&5) ***X-linked recessive ichthyosis-large, dirty brown scaling involving flexor and extensor aspects of limbs and trunk, but sparing rhomboidal spaces in body folds.***

Directly after birth, most affected infants exhibit very fine scaling or peeling of the skin that often goes unnoticed and soon resolves. At the age of 2–6 months, large thick dark brown to yellow-brown hyperkeratoses develop covering the trunk, the extremities and the neck (The antecubital and popliteal fossae are usually spared. The palms of the hands and the soles remain unaffected. In around 30% of patients, the colour of the scale is light grey. These patients may be misdiagnosed as having IV. Dark hyperkeratosis of the lateral aspects of the trunk and the back of the neck is a feature which is typical of RXLI and is usually not present in IV. (20)

Lamellar Ichthyoses Erythoderma

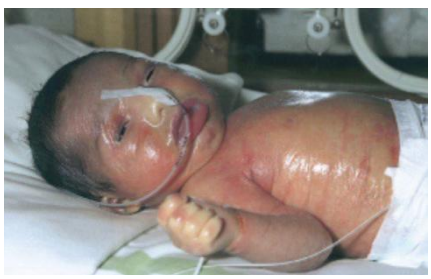


Figure 6

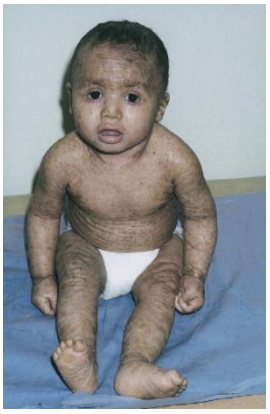


Figure 7

Lamellar ichthyosis is a rare form of ichthyosis, which presents at birth as a "Collodion baby"; the baby is encased in a taut, inelastic membrane. In this autosomal recessive disorder, the baby later develops large, thick, plate-like scales all over the body, including the flexures. Facial involvement often results in ectropion and eclabium (10)

Congenital Ichthyosiform Erythoderma

A. Bullous congenital Ichthysiform Erythoderma

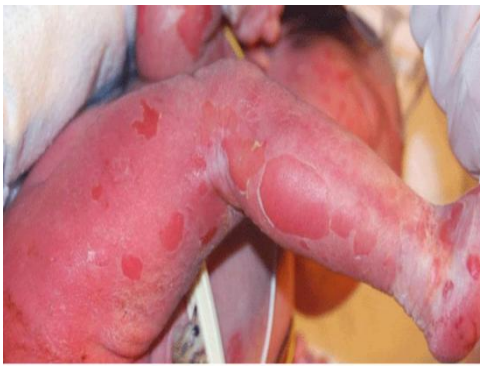


Figure 8

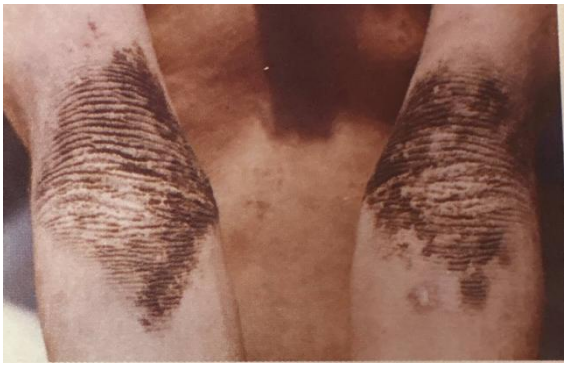


Figure 9

It is inherited as an autosomal dominant trait. At birth, the skin is erythematous, moist and tender. Blisters develop at or shortly after birth, and later, thick dark grey brown scales form a warty-ridged pattern. There is accentuation in the areas of flexures and on the palms and soles. Normal appearing skin within a hyperkeratotic area is a valuable diagnostic sign. Skin colonisation by Staphylococcus brevibacterium and possibly fungi produces a distinctive and embarrassing body odour. Ectropion and deformed ears are common. (10)

B. Non-Bullous Congenital Ichthysoform Ertythoderma

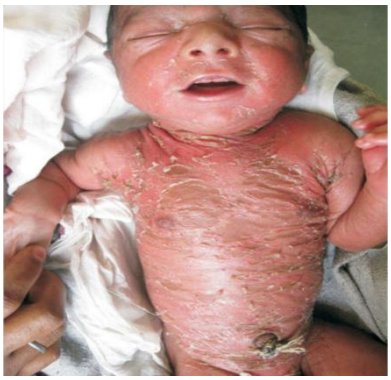


Figure 10

It is an autosomal recessive disorder. Most infants with it are born as collodion baby. As the membrane is cast off in 10 to 14 days, generalized erythema and scaling are apparent. Scales may be large and plate like on the legs but are apt to be fine on the trunk, face and scalp. It has a tendency to improve at the time of puberty. Ectropion, deformities of the ears and sparsity of the scalp hair are common accompaniments. (10)

Ichthyosiform Syndrome

A. Refsum's syndrome (Heredopathia atactica polyneuritiformis)

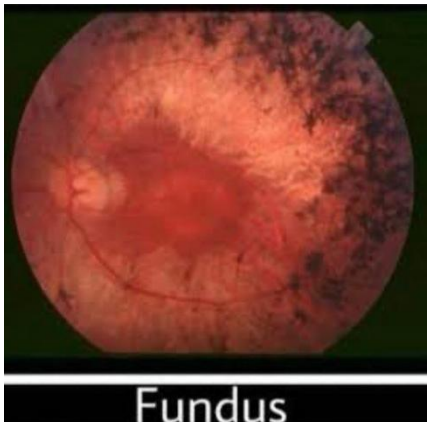


Figure 11

It manifests usually in the second decade.

Skin is affected by an ichthyosis very similar to ichthyosis vulgaris.

Neurological changes include a cerebellar degenerative disorder (cerebellar ataxia), a progressive polyneuropathy, retinitis pigmentosa, and a sensory deafness. Rarely, cardiac abnormalities have been described. (10)

B. Sjögren's-Larsson syndrome

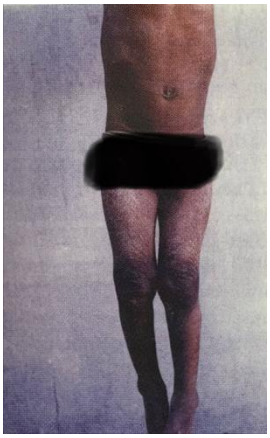


Figure 12

The skin disorder becomes evident after the first few months of life with scaling over the body and hyperkeratosis of palms and soles.

The neurological component usually starts at 2-3 years of life and remains static after puberty, consists of a spastic diplegia, or occasionally a tetraplegia with mental retardation. Other features are seizures and degeneration of retina. (10)

C. KID syndrome:

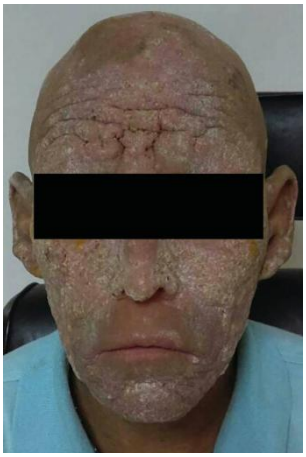


Figure 13

The acronym KID-**K**eratitis, **I**chthyosis, and **D**eafness describes the salient clinical features of this syndrome. (10)

D. Netherton's syndrome

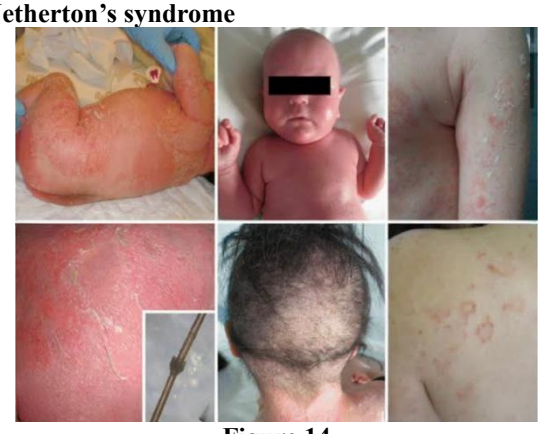


Figure 14

It is a rare autosomal recessive disorder characterised by the concurrence of ichthyosis linearis circumflexa, trichorrhexis invaginata (bamboo hair) and atopic dermatitis. (10)

E. CHILD syndrome:

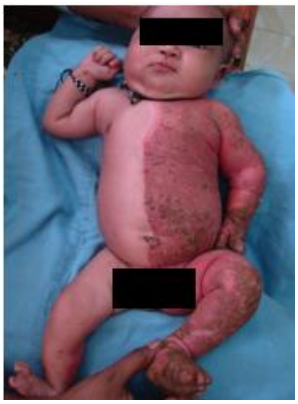


Figure 15

The acronym **CHILD** describes a very rare disorder comprising **C**ongenital **H**emidysplasia with **I**chthyosiform erythroderma and unilateral **L**imb **D**efects, mainly skeletal hypoplasia. (10)

F. IBIDS syndrome (Tay's syndrome):

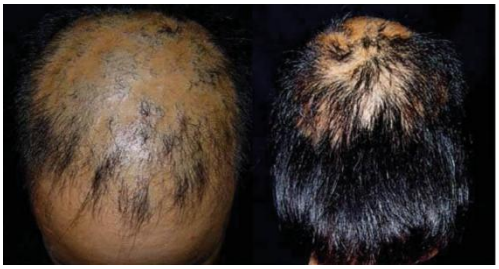


Figure 16

The acronym IBIDS describes **I**chthyosis, **B**rittle hair, **I**mpaired intelligence, **D**ecreased fertility and short **S**tature. (10)

Acquired Ichthyoses

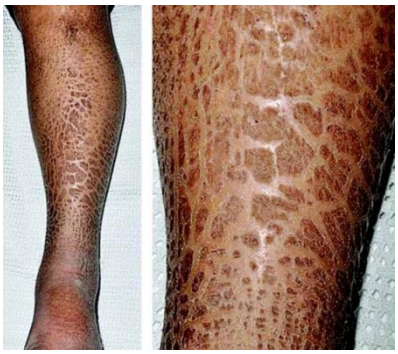


Figure 17

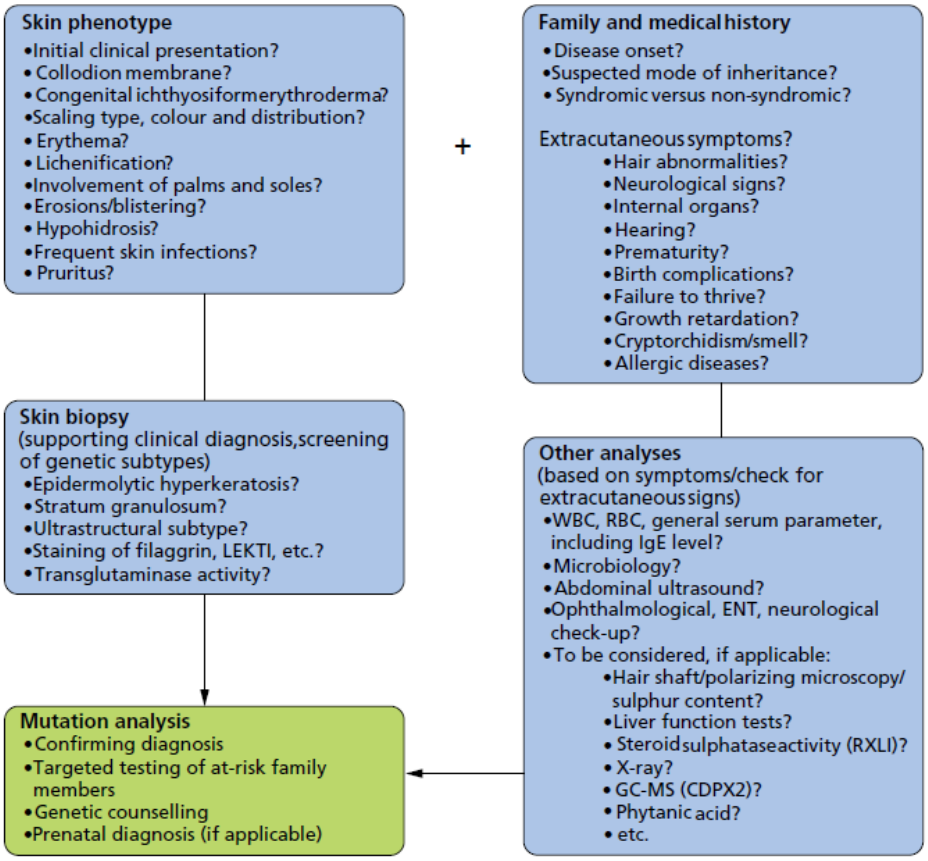
The onset of AI is typically sudden, with initial involvement of the lower limbs followed by more widespread skin involvement. Pruritus can be severe. The scalp shows abundant fine scales, and there may be palmoplantar hyperkeratosis. The flexures and face are typically spared due to higher humidity and the size and number of sebaceous glands, respectively. (20)

Unani Alamaat (Clinical Features)

The skin of the body becomes dry and Flaky; in extreme conditions, dryness is accompanied by itching. If the severity is mild, itching may be absent. In the takassur (thickening/proliferative) type, the intensity is greater. Due to the excessive viscosity and irritative nature of the morbid matter (sauda), it produces فساد (pathological disturbance) in the skin.

As a result, severe itching occurs; scaling and, at times, peeling of the skin is observed. The skin becomes extremely dry and starts resembling the hide of a deer (or leather-like skin). (18)

Diagnosis



(20)

Acquired ichthyoses

There are no clinical or pathological features that are pathognomonic for acquired ichthyosis; it is therefore a diagnosis usually made by exclusion. Late onset, the existence of an inciting factor and the absence of family history and of personal or familial atopic diathesis all support the diagnosis of acquired ichthyosis. Clinically and histopathologically, many cases have been reported to resemble ichthyosis vulgaris, but exceptions have been described (4)

Unani Diagnosis (Tehqiqat)

Based on the clinical manifestation of the patient. Fish-like appearance of skin (مچھلی کی جلد جیسی). (12, 18)

Management

Inherited Ichthyosis

Ichthyosis Vulgaris

Treatment is focused on emollients, particularly ointments that hydrate the stratum corneum or creams containing glycerol. In those patients without concomitant atopic eczema, urea containing creams (up to 10%) or creams containing lactic acid (up to12%) also work well. In contrast to autosomal recessive congenital ichthyosis, daily bathing is not necessary, but showering and subsequent application of emollients is advisable. (20)

X-Linked Recessive Icthyoses

Emollient therapy is the mainstay of treatment. Systemic retinoids such as acitretin may be given at low dosage during periods of disease exacerbations, e. g. during winter. (20)

Lamellar Icthyoses and Congenital Icthyoses

Lamellar ichthyosis (LI) and congenital ichthyosiform erythroderma (CIE) are examples of autosomal recessive congenital ichthyosis (ARCI). Hence, treatment is the same for both types of ichthyoses.

ARCI requires lifelong management based on the establishment of the correct molecular diagnosis. Collodion baby management is best regarded as a dermatological emergency, requiring a multidisciplinary approach. Neonates should be nursed in a high-humidity incubator in a neonatal intensive care unit, with close monitoring of body temperature. Emollients should be applied at least twice daily. Topical salicylic acid is contraindicated to avoid metabolic acidosis. Complications include infection, ectropion, poor feeding and restricted pulmonary ventilation.

The subsequent general management approaches for ARCI are:

- Emollient therapy: high water content ointment/petrolatum-like ointments, bandage wraps, urea or lactic acid additives; salicylic acid contraindicated.
- Bathing: daily, with sodium bicarbonate additive.
- Systemic therapy: retinoids, including acitretin or isotretinoin.

There are also some specific management (20)

UNANI PRINCIPLES OF TREATMENT (اصول علاج)

Use Munzij (concoctive) and Mushil (purgative) drugs, and apply cold fomentation (Tabreed). Perform gentle massage with appropriate medicated oils, and, when required, use resolvent (Muhallil / Khabisat) preparations. ” (18)

Treatment (Ilāj)
Use Munzij (concoctive) and Mushil (purgative) medicines to eliminate morbid matter.
Munzij Formula (Concoctive Decoction):
- Post-e-Saleeb – 11 grams
- Unnab (Jujube) – 5 grams
- Gaozaban (Borago officinalis) – 7 grams
- Asl-us-Soos (Liquorice root) – 4 grams
- Banafsha (Viola odorata) – 7 grams
- Parpata – 5 grams

Soak all the above drugs in water overnight.

In the morning, boil and reduce to 25 grams, strain, and administer.

When the signs of concoction (Nuzj) appear, then use Mushil (purgative) medicine.

Mushil Formula (Purgative):
After adequate concoction of the morbid matter, prepare the following:
- Turbud (Operculina turpethum)
- Beq-e-Saibi
- Maghz-e-Faloos Khyar Shambar
- Roghan-e-Badam (Almond oil)

Administer as directed to induce purgation.
After purgation, again give Munzij decoction if required.

Dietary Instructions:
Prepare barley water and mix it with Arq-e-Kasni.
Add 5 grams of Roghan-e-Badam (almond oil).
Use a light diet. Avoid heavy, spicy, and flatulent foods.

After Recovery:
Use Tabreed (cooling measures) as required.
Detoxification of the body should be carried out by administering Joshanda-e-Aftimoon.
For the purpose of eliminating excessive Rutūbat (morbid humours/moisture), Tanqiya-e-Badan (systemic purification) should be performed.

Thereafter, to restore and replenish normal moisture, nourishing diets such as milk and the meat of animals (شیرخوار جانوروں کا گوشت کھلائیں) should be prescribed. (18)

Lifestyle Modifications:
For the purification of the body, a decoction of Aftimoon should be administered.

To eliminate excessive and morbid moisture (Rutūbat-e-Ghayr-Tabi'ī), systemic purification of the body should be carried out.
In the diet, the meat of suckling animals should be prescribed so that normal moisture is restored and bodily strength is maintained.

Moderate and appropriate foods should be given according to need, and the patient should be advised to get adequate rest and tranquillity. (11)

3. Conclusion

Ichthyosis comprises a complex group of disorders characterised by defective keratinisation, abnormal epidermal differentiation, and impaired skin barrier function, which causes lifelong physical discomfort and a notable psychosocial burden. Advanced molecular genetics has enhanced the understanding of inherited ichthyoses, revealing precise defects in proteins and lipids which is important for epidermal homeostasis. Similarly, acquired ichthyoses serve as important dermatological markers of underlying systemic diseases and metabolic disturbances, necessitating thorough clinical assessment.

The Unani system of medicine imparts a remarkably coherent and holistic explanation of ichthyosis, narrating it as a manifestation of abnormal black bile dominance, pathological combustion of humours, and immoderate dryness of the skin. The concept of impaired quwwat-e-mughayyirah closely correlates with modern notions of defective protein and lipid metabolism, which results from genetic mutations or systemic disease. This convergence of ancient wisdom and extant science underscores the timeless relevance of Unani principles in dermatological disorders.

Management of ichthyosis requires a long-term, multidisciplinary approach centring on restoring skin barrier function, preventing complications, and improving quality of life. While modern treatment relies predominantly on emollients, keratolytics, retinoids, and supportive neonatal care in extreme congenital cases, Unani therapy focuses on humoral detoxification, systemic purification, dietary regulation, and topical measures directed at correcting the underlying mizāj imbalance.

An integrative approach combining modern dermatological innovation with Unani therapeutic principles may offer improved symptomatic relief, holistic well-being, and culturally acceptable care for patients with ichthyosis. Further clinical and experimental studies are warranted to scientifically validate Unani formulations and to innovate their potential role as adjuncts in the comprehensive management of ichthyosis.

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