# **Avian-Inspired Analogies in Dermatology**

### Introduction

In dermatology, avian analogies creatively describe various skin conditions, using familiar poultry imagery to illustrate distinct phenomena. Terms like "chicken skin" and "fried egg" serve as vivid mnemonic devices, helping clinicians and patients understand and identify skin disorders. Each analogy captures specific visual patterns or clinical features, linking skin conditions to relatable avian images. This enhances communication of dermatological concepts and enriches the diagnostic process, providing a memorable framework for recognizing and categorizing skin conditions. The bird-related analogies in dermatology, along with their associated conditions, are shown in Table 1.

# Bird like facies

The term "bird-like facies" describes a distinct facial appearance characterized by a small face, thin, beaked nose, recessed chin, high-arched cleft palate, micrognathia, and glossopteris. This presentation is observed in conditions such as Hutchinson-Gilford progeria syndrome, Hellerman-Streiff syndrome, Nijmegen breakage syndrome, familial partial lipodystrophy, Cockayne syndrome, and Werner syndrome.<sup>[1-3]</sup>

### **BLEND TAN EGG**

The malignancies eccrine spiradenoma, neuroma, glomus tumor, leiomyoma, angiolipoma, neurilemmoma, and dermatofibroma are frequently referred to by the acronym ENGLAND or GLENDA. Granular cell tumor and endometrioma were added to the acronym "LEND AN EGG." Now that tufted angioma and blue rubber bleb nevus have been added to this list, the acronym is "BLEND TAN EGG." [4]

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### Chicken skin

"Chicken skin" in dermatology usually refers to a disorder called keratosis pilaris [Figure 1]. Commonly occurring on the upper arms, thighs, cheeks, and buttocks, keratosis pilaris is a benign skin condition that is characterized by small, rough, follicular-centric keratotic papules caused by keratin-blocking hair follicles that give a stippled appearance resembling gooseflesh, goosebumps, or chicken skin.<sup>[5]</sup>

# **Chickenpox**

Chickenpox [Figure 2] is an infection caused by the varicella-zoster virus. The condition is characterized by an itchy, blister-like rash, fever, and general malaise. Chickenpox primarily affects children but can also occur in adults.<sup>[6]</sup>

# Chicken wire appearance/pattern

### Direct immunofluorescence

The "chicken wire" appearance is a term used in dermatopathology to describe a distinctive pattern observed in direct immunofluorescence microscopy of skin biopsies, revealing a "chicken wire" or "net-like" pattern of IgG and complement component C3 deposits around the surface of the epidermal cells in cases of pemphigus.<sup>[7]</sup>

### Dermoscopy

A diagnostic characteristic of plexiform neurofibromas, a type of neurofibroma frequently observed in neurofibromatosis type 1, is its "chicken wire mesh" appearance on dermoscopy. Because of the underlying nerve fibers and the fibrous stroma of the tumor, dermoscopy shows it as a network of tiny, connected lines or grids on the tumor's surface.<sup>[8]</sup>

### Chicken wire erythema

"Chicken wire erythema" is a description used in dermatology to characterize

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| Table 1: Summarizing the bird-related analogies in |   |
|--|---|
| dermatology, along with the associated conditions  |   |
| Bird related terms                                 | <b>Associated Conditions</b>                                      |
| Bird-like facies                                   | Hutchinson-Gilford progeria syndrome,                             |
|  | Hellerman-Streiff syndrome, Nijmegen                              |
|  | breakage syndrome, Cockayne syndrome,                             |
|  | Werner syndrome   |
| Blend Tan Egg                                      | Blue rubber bleb nevus, Leiomyoma, Eccrine                        |
|  | spiradenoma, Neuroma, Dermatofibroma,                             |
|  | Tufted angioma, Angiolipoma,                                      |
|  | Neurilemmoma, Endometrioma, Granular cell tumor, and Glomus tumor |
| Chicken skin                                       |   |
|  | Keratosis pilaris<br>Varicella                                    |
| Chicken pox  |   |
| Chicken wire                                       | a. Direct immunofluorescence – Pemphigus vulgaris                 |
| appearance   |   |
|  | b. Dermoscopy – Plexiform neurofibroma                            |
|  | <ul> <li>c. Clinical morphology – Erythema marginatum</li> </ul>  |
| Crow's feet  | Aging   |
| Eggshell nails                                     | Calcium or iron deficiency, rheumatoid                            |
|  | arthritis, systemic lupus erythematosus,                          |
|  | hypothyroidism  |
| Fried egg  | a. Trichoscopy – Scalp pemphigus                                  |
| appearance   | b. Histopathology – Mast cells                                    |
|  | c. Clinical morphology - Dysplastic nevus                         |
| Goose skin   | Traumatic anserine folliculitis                                   |
| Owl's eye  | Verruca plana, Hodgkin  |
| appearance   | lymphoma (Reed-Sternberg cells),                                  |
|  | cytomegalovirus infection   |
| Parrot beak nose                                   | Apert syndrome, systemic sclerosis, Crouzon                       |
|  | syndrome  |
| Parrot beak nails                                  | Cocaine abuse, systemic sclerosis                                 |
| Plucked chicken skin                               | Pseudoxanthoma elasticum  |
| Pseudoparalysis of                                 | Congenital syphilis   |
| Parrot   |   |
| Stork bite   | Nevus simplex (salmon patch)                                      |
| Swan neck  | Rheumatoid arthritis, hand deformities in                         |
| deformity  | leprosy   |
| Turkey ear   | Sarcoidosis, lupus vulgaris, leprosy                              |
| Turkey gobbler neck                                | Aging   |
| Ugly duckling sign                                 | Melanoma, atypical moles  |

a net-like or reticulated pattern of erythema seen in conditions like erythema marginatum. Erythema marginatum is a skin manifestation primarily associated with acute rheumatic fever and is sometimes linked with other conditions like infections or autoimmune diseases.<sup>[9]</sup>

### Chicken wire pattern

The clinical word "reticulate" is frequently employed to describe skin lesions that have a "net-like," "sieve-like," or "chicken wire" configuration. This pattern of skin lesions is seen in several congenital and acquired dermatoses, as well as a few systemic disorders.<sup>[10]</sup>



Figure 1: Clinical image showing keratosis pilaris, characterized by multiple keratotic follicular papules on the upper outer aspect of the left arm. The papules are small, rough, and skin-colored, giving a "chicken skin" appearance

# Crow's feet

Crow's feet, also known as lateral canthal lines, are wrinkles that extend from the lateral canthus to the temples. They result from various factors, including the action of the orbicularis oculi muscle, loss of skin elasticity, age-related skin changes, and photoaging. Crow's feet are among the most common facial wrinkles.<sup>[11]</sup>

### Eggshell nails

Eggshell nails, also known as hapalonychia, are characterized by thin, fragile, and concave nails that resemble the appearance of an eggshell. This condition can be associated with various systemic diseases and nutritional deficiencies, such as calcium or iron deficiency, rheumatoid arthritis or systemic lupus erythematosus, hypothyroidism, and trauma to the nails.<sup>[12]</sup>

### Fried egg appearance

### **Trichoscopy**

The "fried egg" appearance is a distinctive trichoscopic finding observed in scalp pemphigus, particularly pemphigus vulgaris. It is a well-defined, round, and sometimes irregularly shaped lesion with a central hair follicle surrounded by a pale,

hypopigmented halo. The central follicle can appear as a dark spot or a dot, resembling the yolk of an egg, surrounded by a lighter zone akin to the egg white.<sup>[13]</sup>

# Histopathology

Mast cells can be detected in tiny quantities (up to 10 mast cells per 40× area) in the dermis near blood vessels and in greater quantities in some neoplasms [such as neurofibroma [Figure 3] and mastocytosis. Often oval, these cells have a dark, round nucleus in the center, giving them the appearance of a "fried egg." [14]

### Clinical

Dysplastic nevi are typically larger than ordinary nevi, measuring over 5 mm in diameter. They often exhibit multiple colors, including shades of light brown, dark brown, and pink. Characteristically, they present a "fried egg" appearance, with a darker, raised central papule surrounded by a lighter, flat macular area.<sup>[15]</sup>

### Goose skin

The name "traumatic anserine folliculitis" comes from the clinical image of an anserine look (goose skin-like) with



Figure 2: Clinical image depicting multiple chickenpox (varicella) lesions on the back. The lesions are in various stages, including red macules, vesicles, and crusted papules, distributed diffusely across the skin

follicular papules [Figure 4] and the causative etiologic factor (pressure or friction). Due to their sensitive skin and increased susceptibility to stress and friction, children and teenagers are the most common age groups to have the ailment.<sup>[16]</sup>

# Owl's eye appearance

The "owl's eye" appearance, identified in conditions like verruca plana and Hodgkin lymphoma histopathology, refers to the nuclei of vacuolated cells surrounded by empty shells. It can also describe Reed-Sternberg cells, which are bi- or multi-lobed. Additionally, this pattern is observed as inclusion bodies in cytomegalovirus infection.<sup>[14]</sup>

### Parrot beak nose

"Parrot beak nose," also known as psittichorhina, refers to a prominent nasal deformity characterized by a large dorsal hump and a low, downward-tilted nasal tip. This feature is often due to a short and narrow maxilla and is seen in conditions like Apert syndrome, systemic sclerosis, and Crouzon syndrome.<sup>[17-19]</sup>

### Parrot beak nail

"Parrot beak nails" are characterized by an excessive forward curvature of the free edge of the fingernails and toenails. This condition can be associated with cocaine use and systemic sclerosis.<sup>[20]</sup>

### Plucked chicken skin

"Plucked chicken skin" is a term used informally to characterize the skin's appearance in cases of Groenblad-Strandberg syndrome or pseudoxanthoma elasticum [Figure 5]. The gradual calcification and fragmentation of elastic fibers are its defining features,

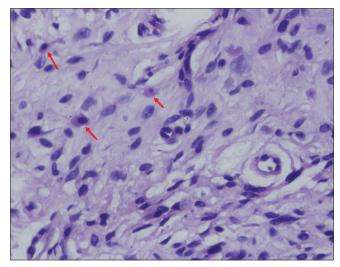


Figure 3: Hematoxylin and eosin (H and E) stained section at 400x magnification, showing spindle-shaped cells with elongated, wavy nuclei, characteristic of neurofibroma. Mast cells with a distinctive "fried egg" appearance (red arrow) is interspersed within the myxoid stroma

resulting in loose, wrinkled skin that has a "plucked chicken skin" appearance. [21]

# Pseudoparalysis of Parrot

"Pseudoparalysis of the Parrot" describes reduced limb movement in infants caused by local periosititis and severe pain, which are early indicators of congenital syphilis. Radiologically, it appears as transverse, saw-tooth, dense bands due to altered mineralization at the zone of provisional calcification. [22]

### Stork bite

A stork bite, also known as nevus simplex or salmon patch, is a common birthmark seen in newborns. It appears as a pink or reddish patch, typically found on the back of the neck, forehead, eyelids, or between the eyebrows. The name "stork bite" comes from old folklore that storks bring babies, and the mark resembles a peck from the bird's beak.<sup>[23]</sup>

# Swan neck deformity

Swan neck deformity is characterized by hyperextension of the proximal interphalangeal joint and flexion of the distal interphalangeal joint, along with reciprocal flexion of the metacarpophalangeal joint. This deformity results from an imbalance in the extensor mechanism of the digit. It is commonly associated with conditions such as



Figure 4: Clinical image showing multiple, grouped, discrete, tiny, skin-colored follicular papules on the right cheek, suggestive of traumatic anserine folliculitis. The lesions resemble "goose skin," presenting as rough, small bumps around the hair follicles

rheumatoid arthritis and hand deformities due to leprosy, where damage to the connective tissues and muscles leads to the disruption of the normal alignment and function of the joints.<sup>[24]</sup>

# Turkey ear

"Turkey ear" is a descriptive term traditionally used for lupus pernio involving the earlobe, a skin manifestation of sarcoidosis. However, the clinical appearance of lupus vulgaris on the earlobe can be similar to that of lupus pernio. Therefore, the term "Turkey ear" may also be appropriately used to describe lupus vulgaris affecting the earlobe. [25]

# Turkey gobbler neck

The "turkey gobbler" deformity, or "turkey neck," is characterized by sagging skin, excess fat, and prominent muscle bands under the chin and along the neck. It occurs due to a combination of skin laxity, submental fat accumulation, and changes in the platysma muscle. Aging leads to reduced skin elasticity, causing it to droop, while fat deposits under the chin add to the fullness. The platysma muscle, which normally provides structural support, can become lax and develop vertical bands as its fibers separate and diverge over time. This muscle relaxation and banding disrupt the smooth neck contour, contributing to the "turkey gobbler" appearance.<sup>[26]</sup>

# Ugly duckling sign

A change to the ABCDE rule combines the advantages of this rule with the "ugly duckling sign." The ABCDEF rule, which patients can use to assess their moles at home, neatly combines the "ugly duckling rule" with the addition of the letter "F," which stands for "Funny looking." Similar to the "ugly duckling sign," the "funny looking" mole suggests that there is an overwhelming sense that a location is suspect for melanoma.<sup>[27]</sup>

### **Conclusion**

The use of avian-inspired analogies in dermatology offers a creative and effective means of conveying complex



Figure 5: Clinical image showing numerous firm, round-to-oval, yellowish, non-follicular papules, each a few millimeters in diameter, coalescing into plaques with a symmetric distribution around the neck and axilla. This appearance is characteristic of pseudoxanthoma elasticum, often described as resembling "plucked chicken skin"

dermatological concepts. As dermatology continues to evolve, such imaginative descriptors remain a valuable tool in both education and practice, ensuring that the nuances of skin pathology are communicated with clarity and precision.

# Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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# Conflicts of interest

There are no conflicts of interest.

### References

- Kanathur S, Sarvajnyamurthy S, Somaiah SA. Characteristic facies: An index of the disease. Indian J Dermatol Venereol Leprol 2013;79:439-43.
- Pandit VS. A boy with bird-like facies and ataxia: Cockayne syndrome. Indian J Paediatr Dermatol 2018;19:251-4.
- Keen A, Hassan I. Werner's syndrome. Indian J Dermatol Venereol Leprol 2012;78:380-1.
- Bhat MR, George AA, Jayaraman J. Painful tumours of the skinfrom ENGLAND to LEND AN EGG to BLEND TAN EGG. Indian J Dermatol Venereol Leprol 2019;85:231.
- Kodali N, Patel VM, Schwartz RA. Keratosis pilaris: An update and approach to management. Ital J Dermatol Venerol 2023;158:217-23.
- 6. Centers for Disease Control and Prevention. Chickenpox [Internet]. Last updated August 17, 2023 [cited 2024 Dec 6].
- Shetty VM, Subramaniam K, Rao R. Utility of immunofluorescence in dermatology. Indian Dermatol Online J 2017;8:1-8.
- Agrawal A, Bhardwaj A, Rao M. "Chicken-Wire Mesh" pattern on dermoscopy of plexiform neurofibroma. Indian Dermatol Online J 2024;15:183-4.
- 9. Bygum A, Broesby-Olsen S. Rapid resolution of erythema

- marginatum after icatibant in acquired angioedema. Acta Derm Venereol 2011;91:185-6.
- Sinha S, Kulhari A. Reticulate pigmentary disorders: A review. Pigment Int 2019;6:67-76.
- Hwang K. Crow's feet in men: A symbol of achievements left behind. J Craniofac Surg 2024;35:274.
- Seshadri D, De D. Nails in nutritional deficiencies. Indian J Dermatol Venereol Leprol 2012;78:237-41.
- Sar-Pomian M, Kurzeja M, Rudnicka L, Olszewska M. The value of trichoscopy in the differential diagnosis of scalp lesions in pemphigus vulgaris and pemphigus foliaceus. An Bras Dermatol 2014;89:1007-12.
- Madke B, Doshi B, Khopkar U, Dongre A. Appearances in dermatopathology: The diagnostic and the deceptive. Indian J Dermatol Venereol Leprol 2013;79:338.
- 15. Elder DE. Dysplastic naevi: An update. Histopathology 2010;56:112-20.
- Rambhia KD, Wankhade V, Mukhi J, Singh RP. Traumatic anserine folliculosis. Indian Dermatol Online J 2017;8:59-61.
- 17. Bhatia PV, Patel PS, Jani YV, Soni NC. Apert's syndrome: Report of a rare case. J Oral Maxillofac Pathol 2013;17:294-7.
- Kumar GR, Jyothsna M, Ahmed SB, Lakshmi KS. Crouzon's syndrome: A case report. Int J Clin Pediatr Dent. 2013;6:33-7.
- Ganjre S, Madke B, Prakashey A, Jangid S, Jawade S. Systemic sclerosis presenting with frank exhibition of Mizutani's sign. Cureus 2023;15:e45387.
- Forouzan P, Cohen PR. Parrot beak nail: Case report and review of parrot beak nail dystrophy. Cureus 2021;13:e15974.
- Marconi B, Bobyr I, Campanati A, Molinelli E, Consales V, Brisigotti V, et al. Pseudoxanthoma elasticum and skin: Clinical manifestations, histopathology, pathomechanism, perspectives of treatment. Intractable Rare Dis Res 2015;4:113-22.
- Kocher M, Caniza MA, Durham N. Parrot pseudoparalysis of the upper extremities: A case report. J Bone Joint Surg Am 1996;78:284-7.
- Carlo G. Vascular birthmarks: A hidden world behind a word. Indian J Paediatr Dermatol 2018;19:1-8.
- Gunawan H, Haryati NS, Suwarsa O. Swan neck deformity mimicking claw hand caused by arthritis in leprosy. Case Rep Dermatol 2018;9:231-5.
- Küçükünal A, Ekmekçi TR, Sakız D. "Turkey ear" as a cutaneous manifestation of tuberculosis. Indian J Dermatol 2012;57:504.
- 26. Biggs TM, Lee Steely R. The male neck and TZ-plasty: 28 Years later. Aesthet Surg J 2000;20:31-4.
- Jensen JD, Elewski BE. The ABCDEF rule: Combining the "ABCDE rule" and the "ugly duckling sign" in an effort to improve patient self-screening examinations. J Clin Aesthet Dermatol 2015;8:15.