

UNGUAL DYSCHROMIA

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None

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Nails can have different colors; it may be called ungual dyschromia or chromonychia, which means abnormalities in color of the substance.

The transparency of the nail is important for dyschromia; the pigment may accumulate due to overproduction such as melanin, storage as copper, haemosiderin, drugs, or by surface deposition [1].

Ungual dyschromia may be endogenous and exogenous if the pigment is due to endogenous source the discoloration corresponds to the shape of the lunula (Fig. 1) and if it is exogenous it corresponds to the contour of the proximal nail fold (Fig. 2).

Dyschromia can affect one, several or twenty nails depending on the cause that may be congenital, dermatological, drug side effect, trauma, systemic diseases, miscellaneous, benign and malignant tumors, infectious diseases, others.

Nail dyschromia may be white, black, green, brown, yellow, red, and blue, gray, purple and others, but the most common are white and black.

The white color is called leukonychia and the black discoloration is called melanonychia.

There are three types of leukonychia: true leukonychia, pseudoleukonychia and apparent leukonychia. True leukonychia, the nail plate involvement source is in the matrix, may be partial such as transverse (Fig. 3), punctate (Fig. 4), lineal (Fig. 5) or total, in pseudoleukonychia the matrix is not affected; example white superficial onychomycosis (Fig. 6, 7) and apparent leukonychia is called also apparent leukopathy with involvement of the subungual tissue, subungual hyperkeratosis, (Fig. 8), onycholysis (Fig. 9, 10), apparent leukopathy such as Terry's nail (Fig. 11) associated to cirrhosis, half & half nails with chronic renal failure (Fig. 12, 13), Muehrcke's bands due

to hypoproteinemia and cytostatic drugs (Fig. 14) and anemia. Melanonychia may be longitudinal, transverse, total; can affect fingernails and feet; within its causes have melanonychia racial (Fig. 15), idiopathic Addison's disease (Fig. 16), drugs such as cytostatics (Fig. 17, 18), retinoids such as melanonychia together with the onychomadesis, onycholysis and periungual pyogenic granulomas are the most common drug nail disease [2], psoriasis, lichen planus, infections by bacteria, fungi, trauma, frictional melanonychia (Fig. 19), carpal tunnel syndrome, tumors such as basal cell carcinoma, squamous and melanoma can manifest as a longitudinal melanonychia which may be the first manifestation of the same [3] is very important to consider the A, B, C, D, E, F of injury.

The green nail can be caused by *Pseudomonas* (Fig. 20) and *Candida* infections; the yellow color can be seen in the yellow nail syndrome (Fig. 21), onychomycosis (Fig. 22), dye shoes (Fig. 23), jaundice, cyanosis blue (Fig. 24) be related to hypoxia, argiria, the orange nail polish, the hair dyes (Fig. 25), coffee, smoking (Fig. 26), potassium permanganate, gentian violet (Fig. 27), nevi, racial, Laugier syndrome-Hunziker-Baran, malnutrition, pregnancy, red for subungual nail hematoma (Fig. 28), splinter hemorrhages (Fig. 29), paint, red lunula (Fig. 30) is associated to cardiopulmonary disorders, collagen diseases, malignancies, hematologic, alopecia areata, psoriasis, trauma, idiopathic longitudinal view erythronychia, Bowen's disease and others; red purpuric may be associated with drugs such as clofazimine, heparin, warfarin, capecitabine, psoriasis, polycythemia and some glomus tumor, vascular tumors, trauma (Fig. 31) [4,5]. Nails can have one, two or three colors in the same nail and for different causes.



Figure 1. Endogenous cause of dyschromia, discoloration tends to follow the contour of the lunula.

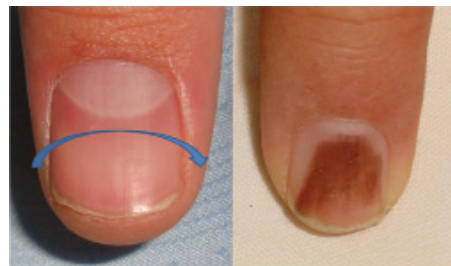


Figure 2. Exogenous cause of dyschromia, discoloration tends to follow the contour of the proximal nail fold.



Figure 3. Leukonychia Transverse.

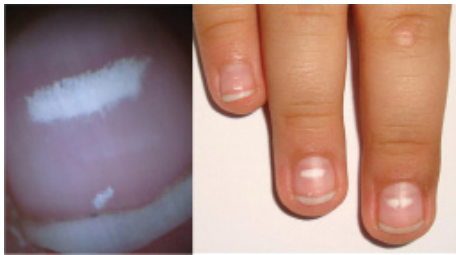


Figure 4. Leukonychia punctata.



Figure 5. Leukonychia lineal.



Figure 6. White superficial onychomycosis.



Figure 7. White superficial onychomycosis.



Figure 8. Subungual hyperkeratosis.



Figure 9. Traumatic onycholysis.



Figure 10. Traumatic onycholysis.



Figure 11. Nails half and half associated to chronic renal failure.

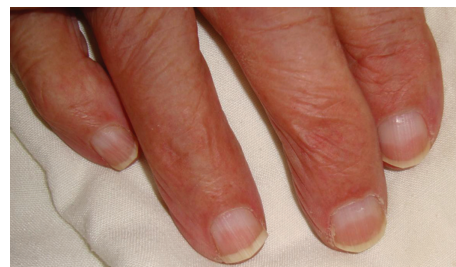


Figure 12. Nails half and half associated to chronic renal failure.



Figure 13. Muehrcke's bands due to hypoproteinemia and cytostatic drugs.



Figure 14. Apparent leukopenia due to anemia.

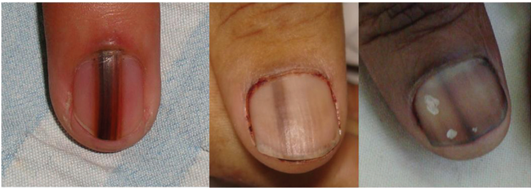


Figure 15. Racial melanonychia.



Figure 16. Melanonychia due to Addison's disease.



Figure 17. Melanonychia due to cytostatic drugs.



Figure 18. Melanonychia due to cytostatic drugs.



Figure 19. Melanonychia frictional.



Figure 20. Green color due to *Pseudomonas* infection.



Figure 21. Yellow nail syndrome.



Figure 22. Onychomycosis.



Figure 23. Yellow nails due to shoe dye.



Figure 24. Acrocyanosis due to sepsis.



Figure 25. Dye hair.



Figure 26. Dyschromia gentiant violet dye.



Figure 27. Dyschromia due to tabaco.



Figure 28. Red color due to hematoma.

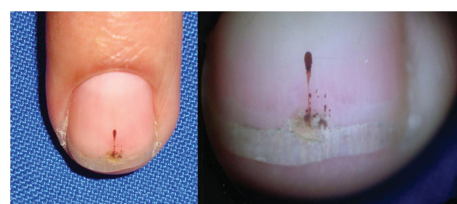


Figure 29. Trauma.



Figure 30. Splinter hemorrhaghe.



Figure 31. Red lunula.

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