ATLAS *of* PIGMENTARY DISORDERS

NAIL DISCOLORATION

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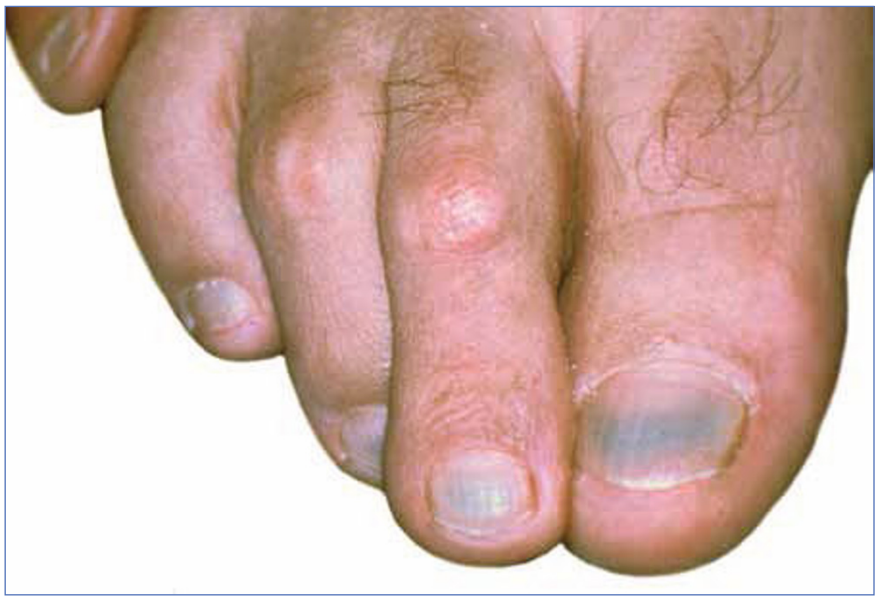
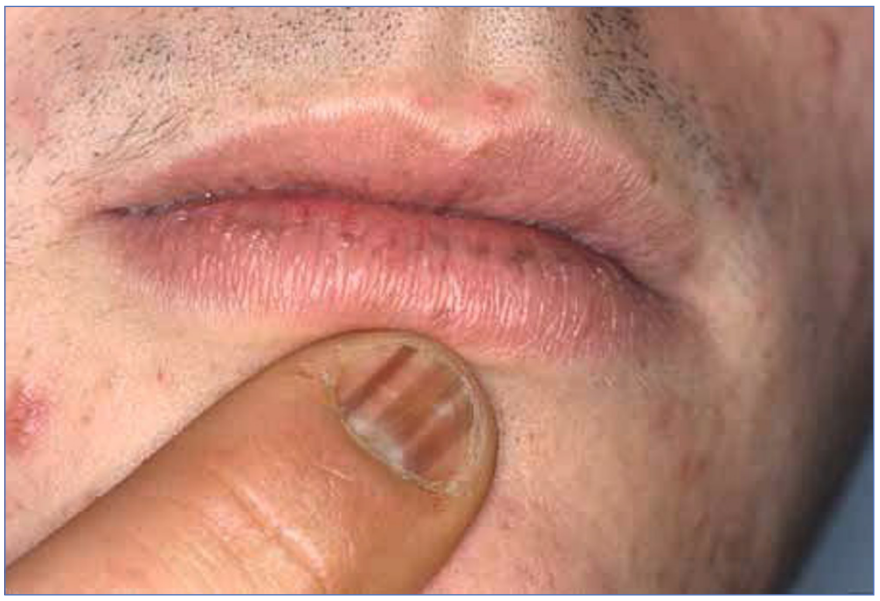
NAIL DISCOLORATION

Robert Baran

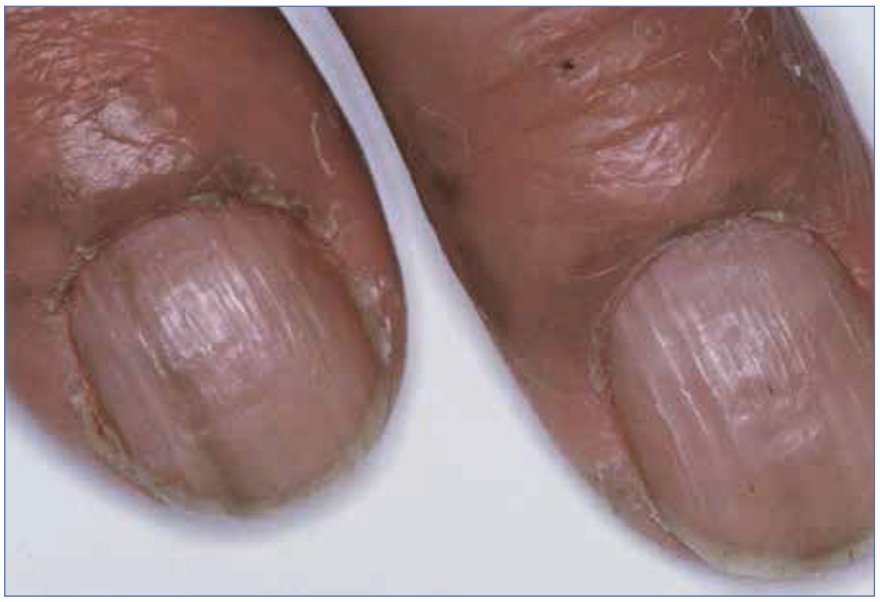


Blue nails due to chloroquine (coll. Robert Baran).



Addison's disease. Longitudinal melanonychia associated with some dark spots of the lower lip (coll. Robert Baran).

Dark nails with pitting due to anthraline in a psoriatic patient (coll. Robert Baran).



Longitudinal melanonychia with pseudo hutchinson sign of the proximal nail fold in Laugier's disease (coll. Robert Baran).

The term 'chromonychia' indicates an abnormality in color of the substance or the surface of the nail plate and/or subungual tissues. Generally, abnormalities of color depend on the transparency of the nail, its attachments and the character of the underlying tissues.

TYPE OF NAIL COLOR CHANGES

Pigment may accumulate due to overproduction (melanin) or storage (hemosiderin, copper, various drugs), or by surface deposition. The nails provide an historical record for up to 2 years (depending on the rate of linear nail growth) of profound temporary abnormalities of the control of skin pigment, which otherwise might pass unnoticed. Color is also affected by the state of the skin vessels, and by various intravascular factors, such as anemia and carbon monoxide poisoning.

EXAMINATION OF ABNORMAL NAILS

There are some important points to note concerning the examination of abnormal nails for color changes. The nails should be studied with the fingers completely relaxed and not pressed against any surface. Failure to do this alters the hemodynamics of the nail and changes its appearance. The finger tips should then be blanched by pressing them on an even surface to see if the nail bed is grossly altered; this may help to differentiate between discoloration of the nail plate and its vascular bed. If the discoloration is in the vascular bed, it will usually disappear.

Further information can be gleaned by transillumination (diaphanoscopy) of the nail using a pen torch placed against the pulp. If the discoloration is in the matrix or soft tissue, the exact position can be identified more easily and dark material or a non-transparent foreign body will give a dark shadow. Furthermore, if a topical agent or superficial infection is suspected as the cause, one can remove the discoloration by scraping or cleaning the nail plate with a solvent such as acetone. If the substance is impregnated more deeply into the nail or subungually, microscopic studies of potassium hydroxide preparations, tangential or punch biopsy specimens using special stains may be indicated. Wood's lamp examination is sometimes useful.

When the discoloration is of exogenous origin, for example from nail contact with occupationally derived agents or topical application of therapeutic agents, the discoloration typically follows the contour of the proximal nail fold when the discolored nail grows out. If the proximal margin of the discoloration corresponds to the shape of the lunula an internal cause is likely.

NAIL DISCOLORATION

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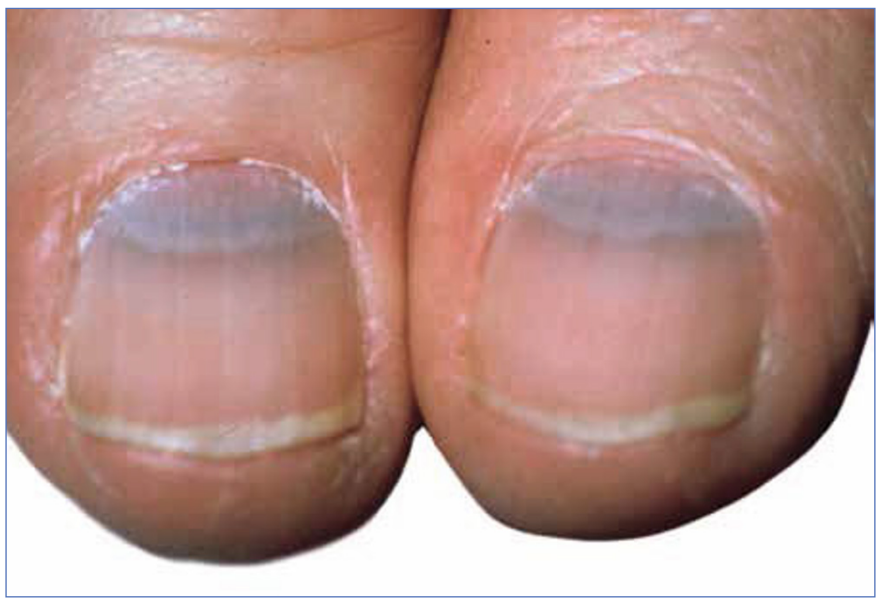
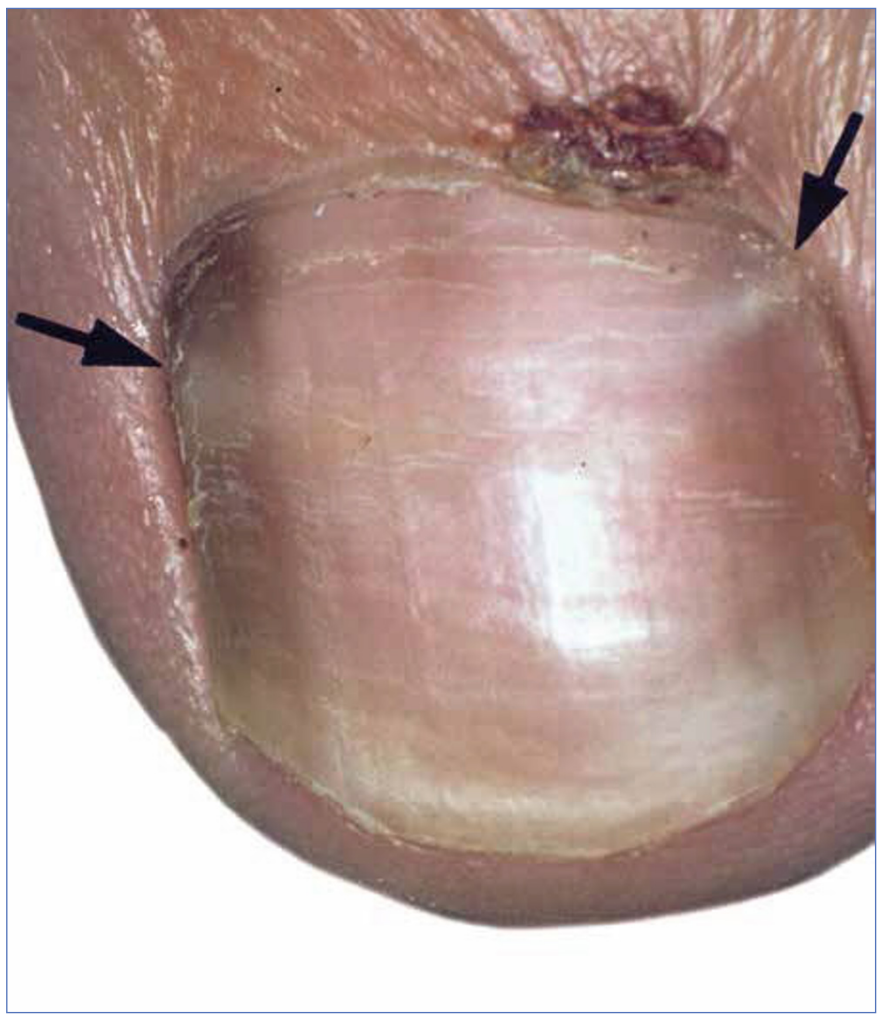
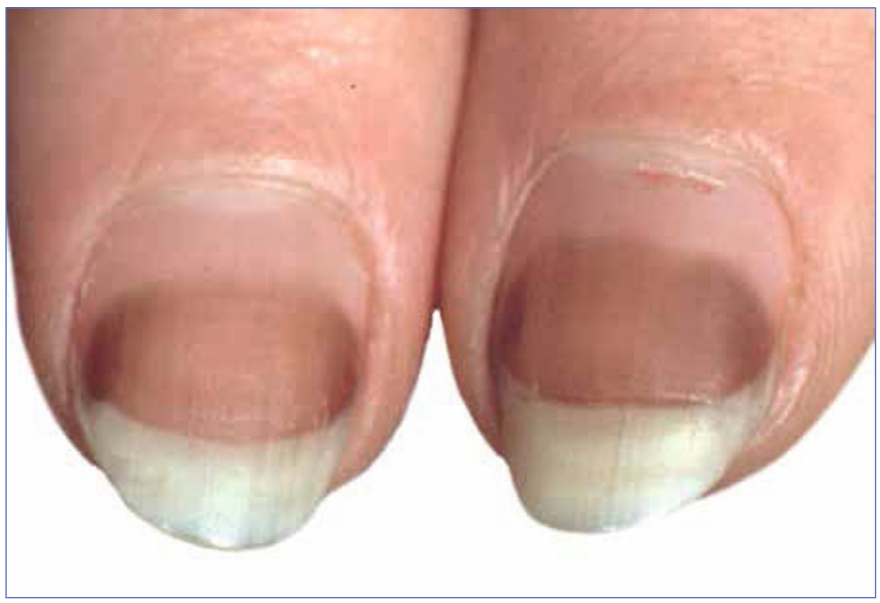


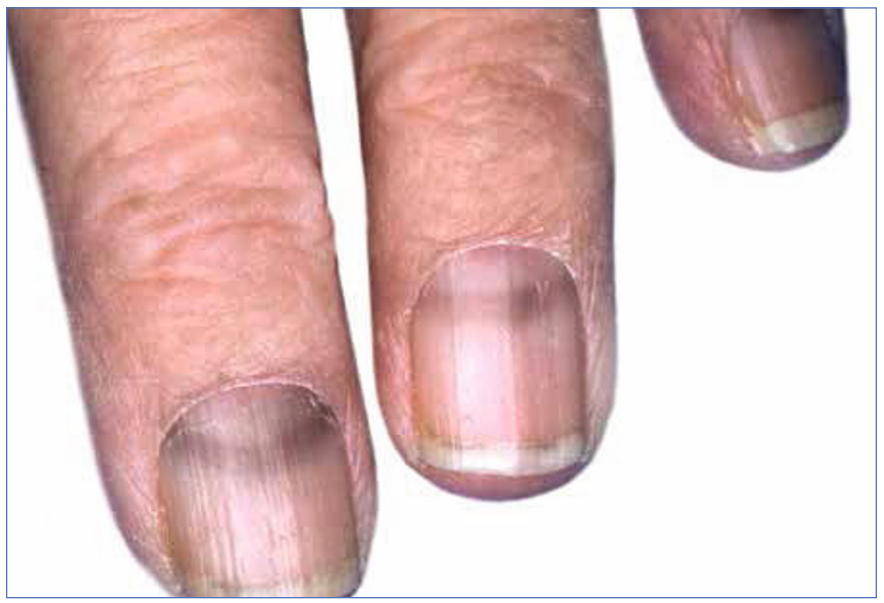
Blue lunula due to argyria (coll. Robert Baran).



Arsenic poisoning resulting in longitudinal melanonychia and transverse leukonychia (coll. Robert Baran).



Exogenous nail pigmentation whose proximal border mimics the shape of the proximal nail fold (coll. Robert Baran).



Argyria highlighting the lunula border: systemic pigmentation (coll. Robert Baran).

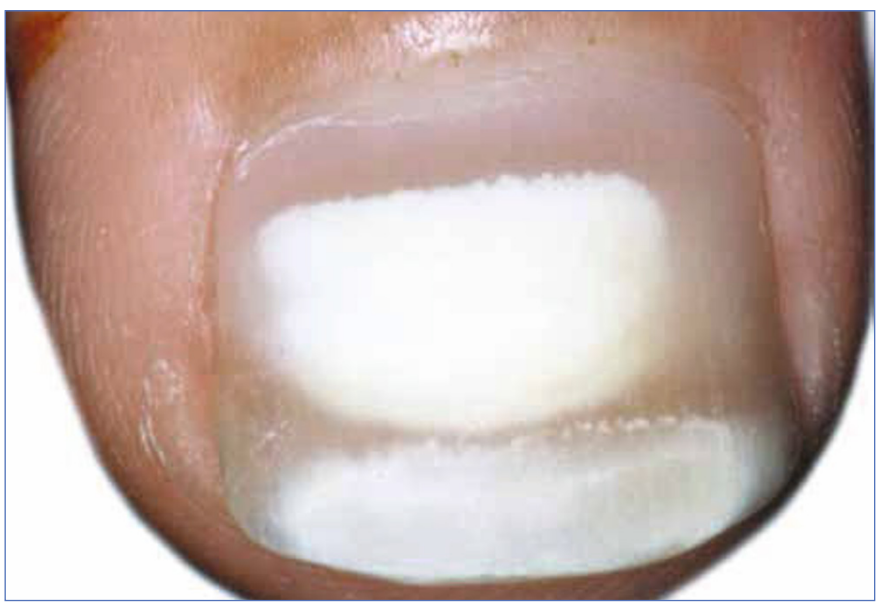
NAIL DISCOLORATION

Robert Baran

Gangrene due to betablockers (coll. Robert Baran).

Total melanonychia due to busulfan (coll. Robert Baran).

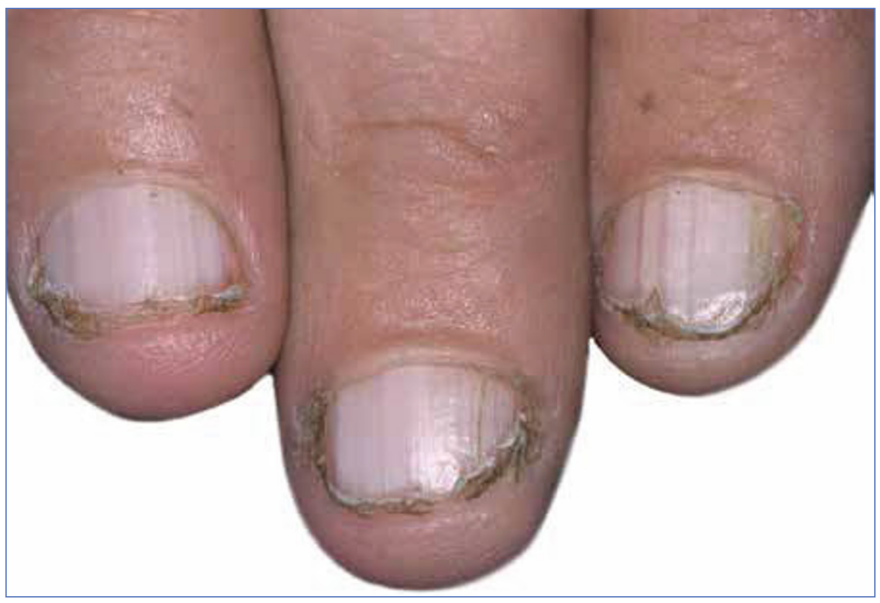
Apparent leukonychia: Terry's cirrhotic nail (coll. Robert Baran).



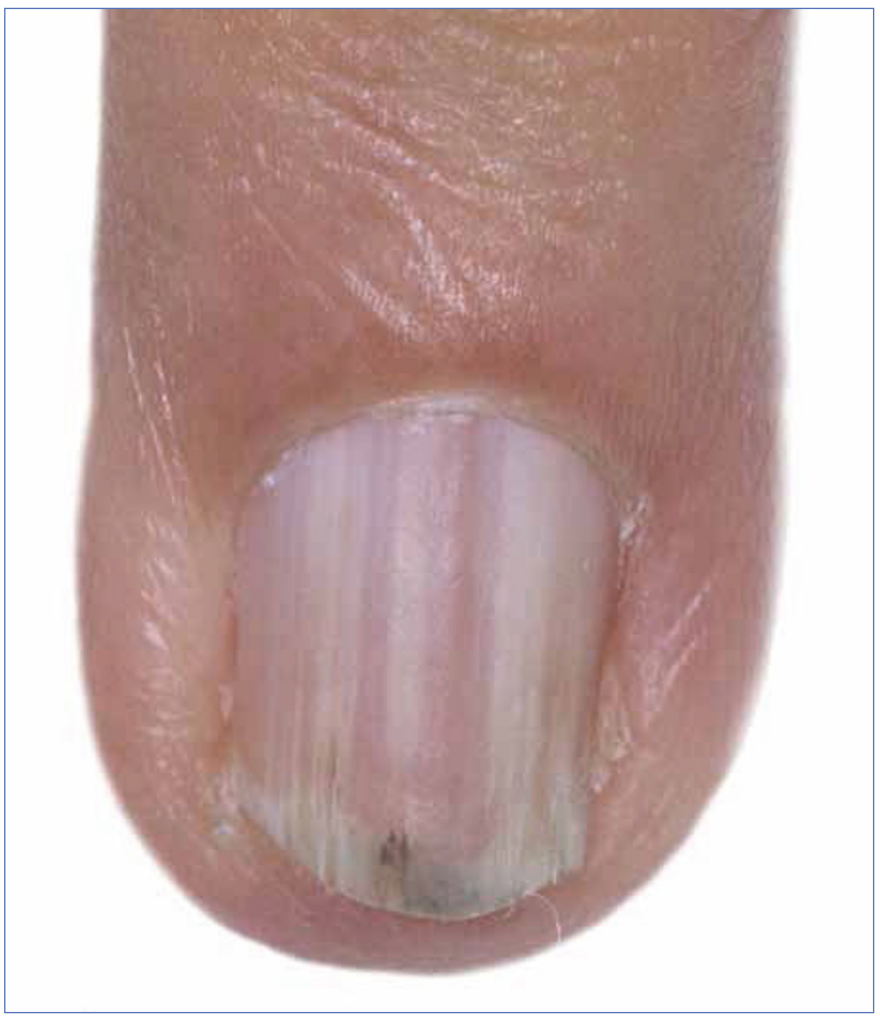
True leukonychia following cryotherapy for treating a wart of the proximal nail fold (coll. Robert Baran).

NAIL DISCOLORATION

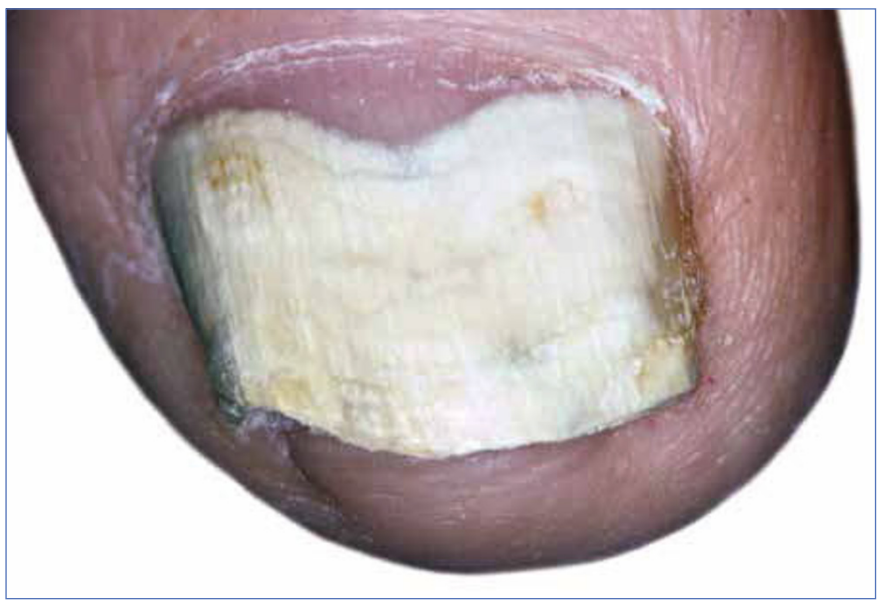
Robert Baran



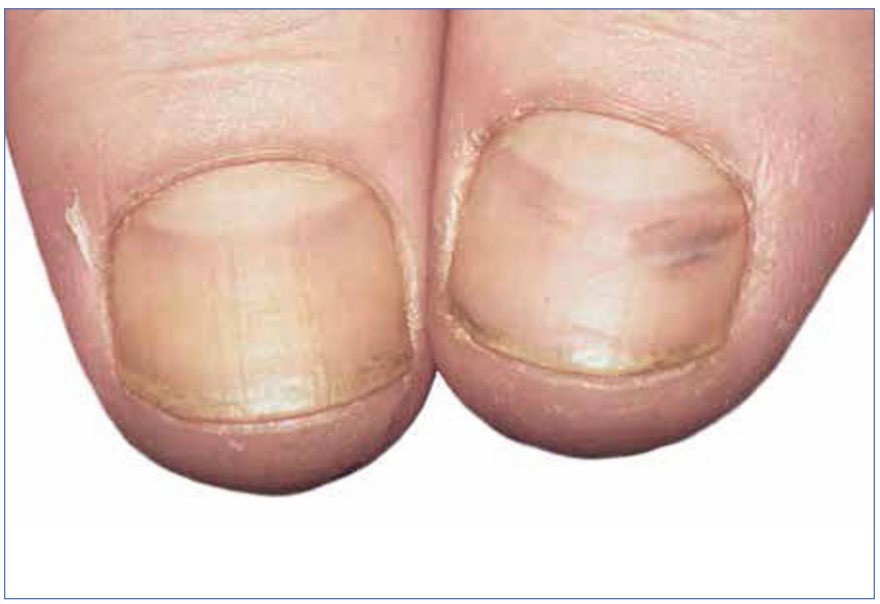
Longitudinal erythronychia (right finger) and longitudinal leukonychia in Darier's disease (coll. Robert Baran).



Longitudinal leukonychia in Darier's disease (coll. Robert Baran).



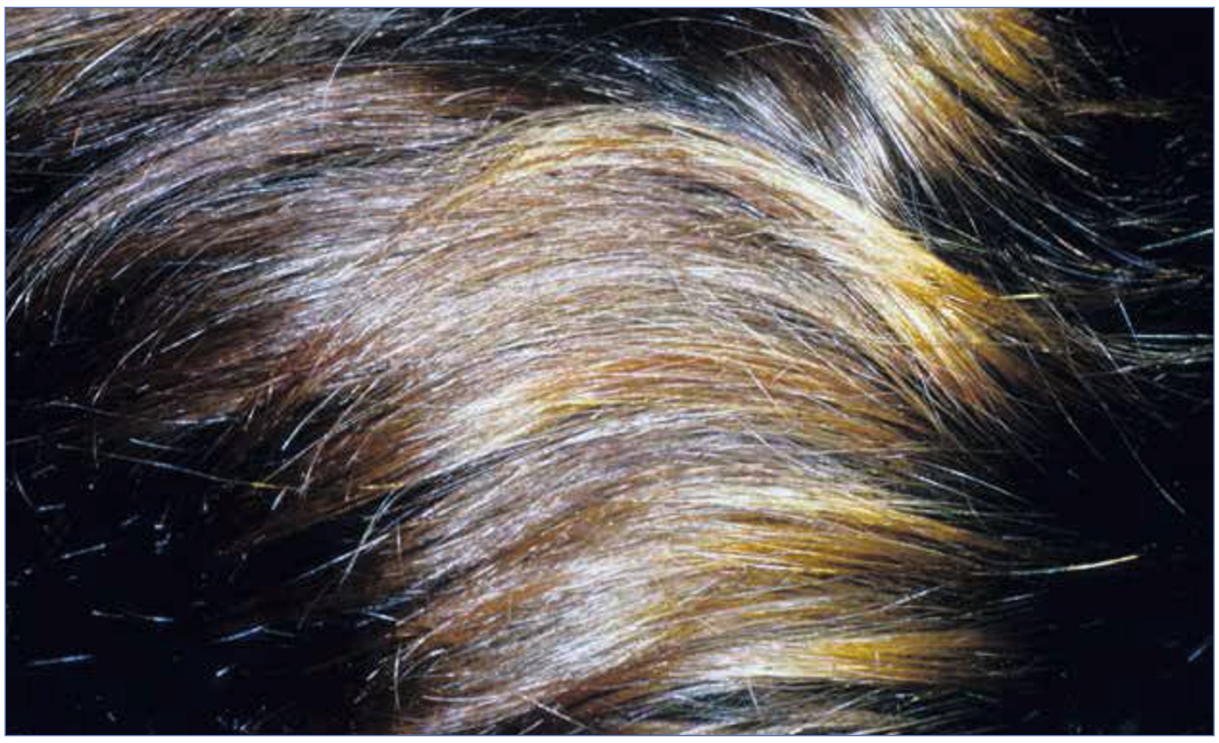
Pseudo leukonychia due to *Scopulariopsis brevicaulis* (coll. Robert Baran).



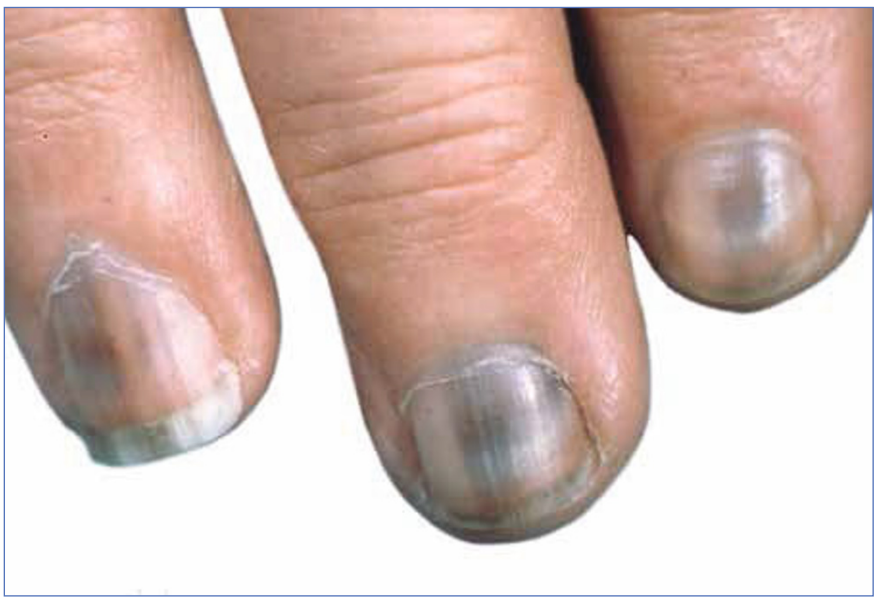
Yellow nail due to dinobuton (insecticide) (coll. Je Walhberg).

NAIL DISCOLORATION

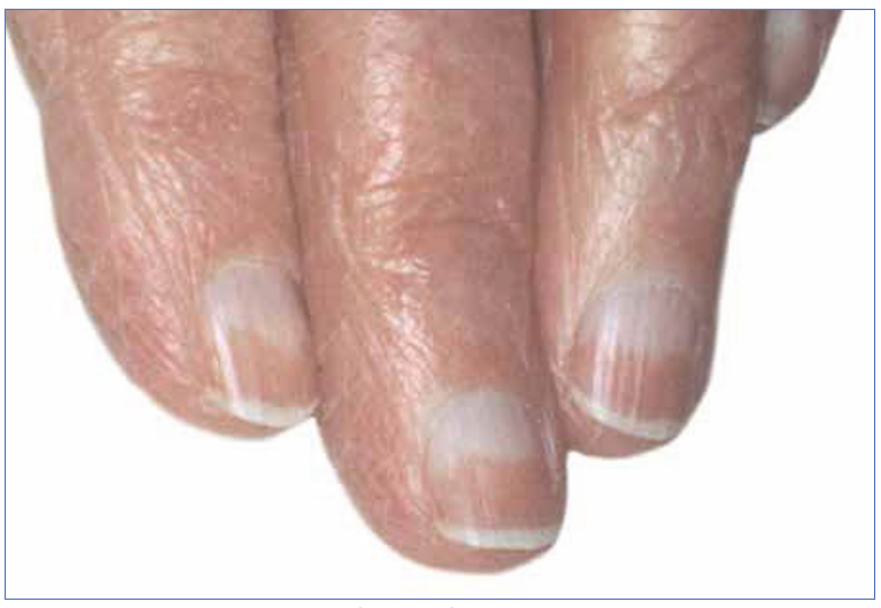
Robert Baran



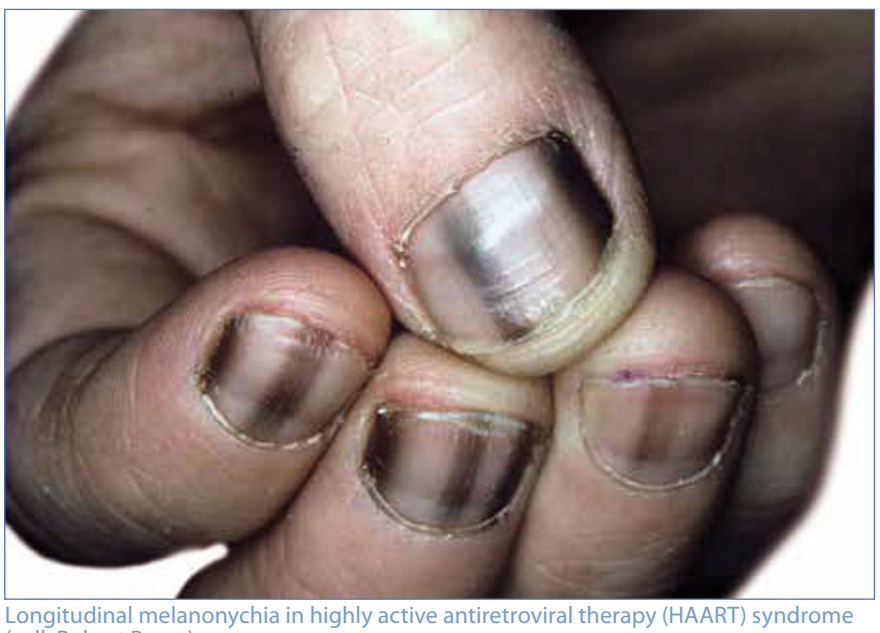
Yellowish hair of the same patient (coll. Je Walhberg).



Longitudinal melanonychia associated to transverse true leukonychia due to endoxan (coll. Robert Baran).



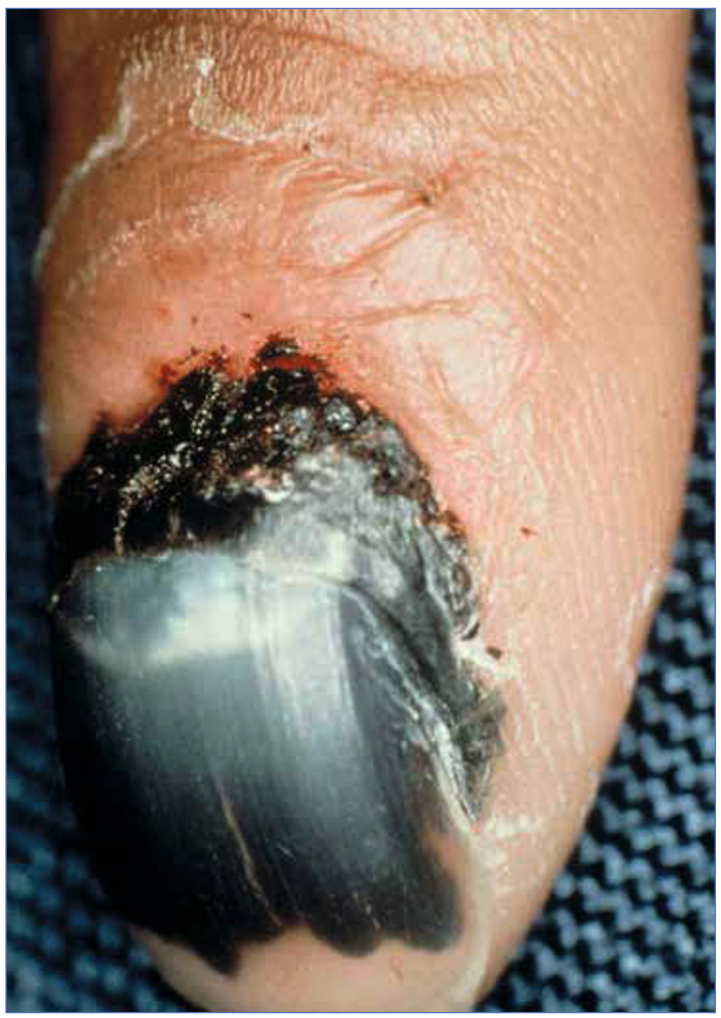
Apparent leukonychia showing half-and-half nail (coll. Robert Baran).



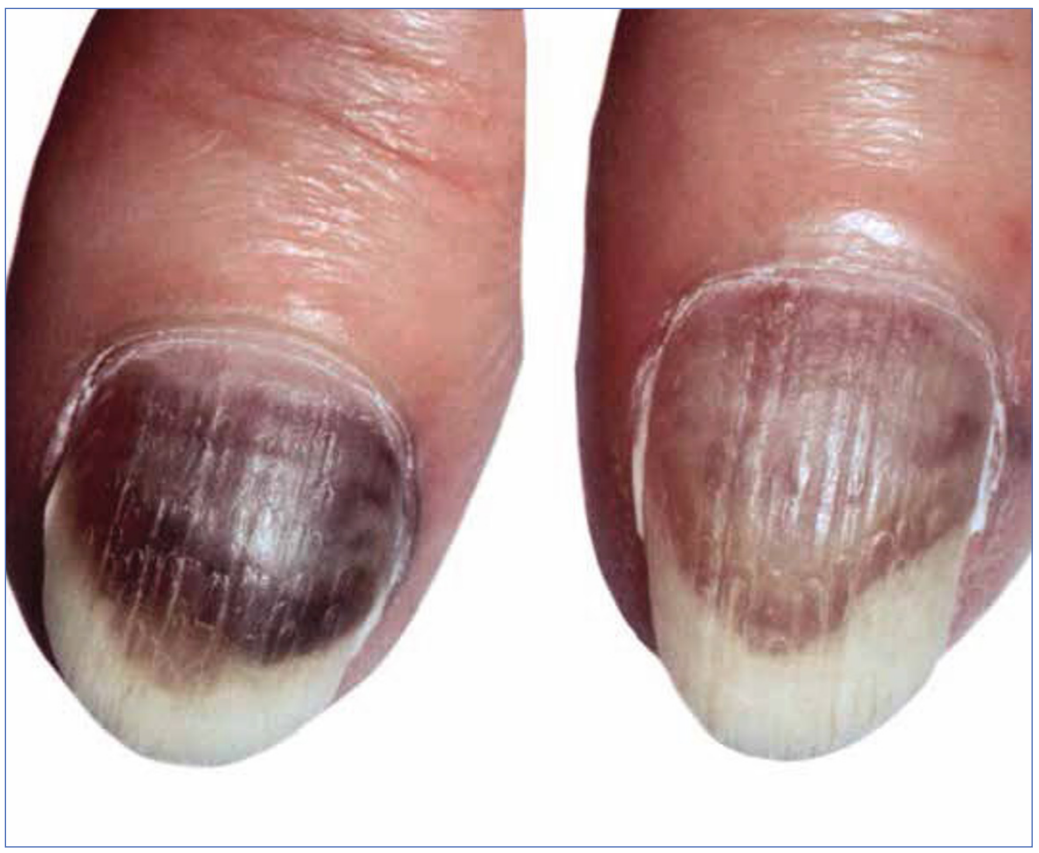
Longitudinal melanonychia in highly active antiretroviral therapy (HAART) syndrome (coll. Robert Baran).

NAIL DISCOLORATION

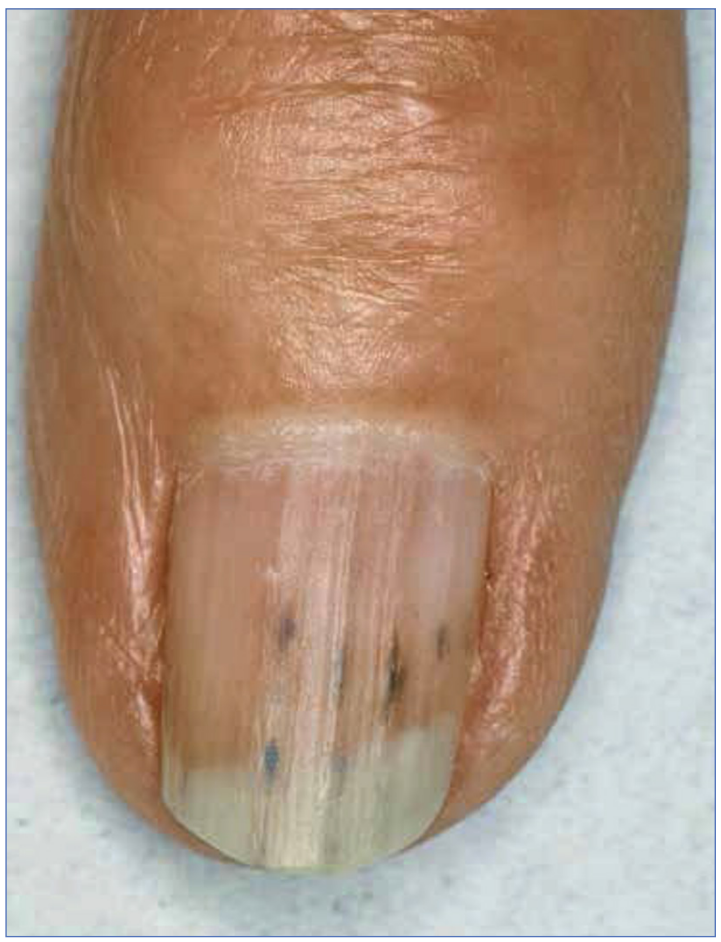
Robert Baran



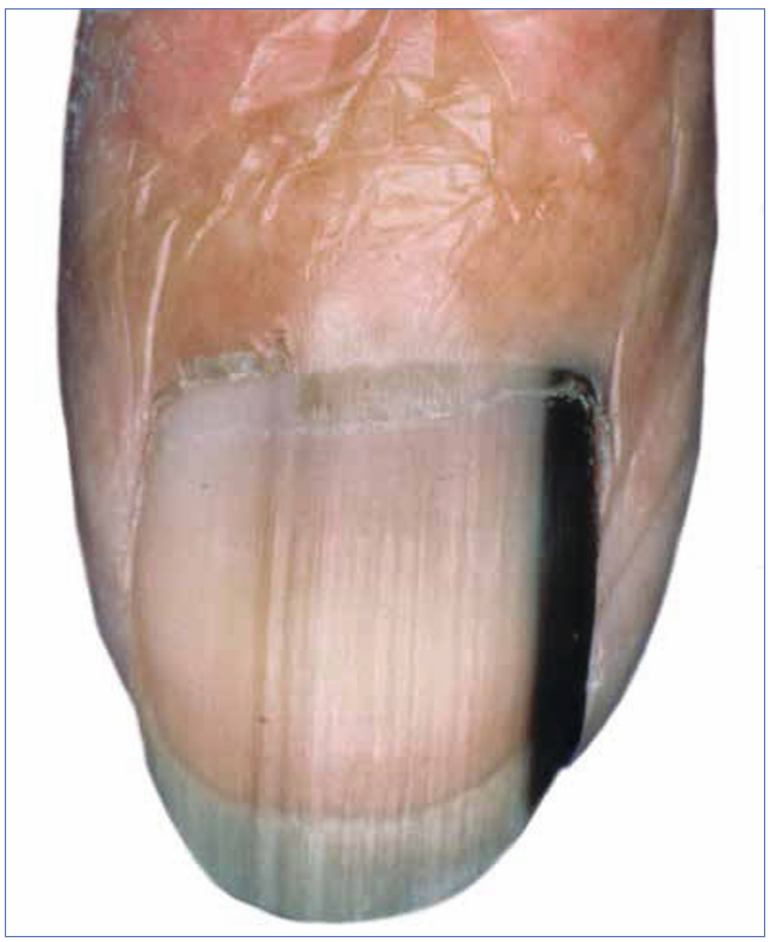
Hematoma (coll. Robert Baran).



Pressure hemorrhages due to docetaxel (coll. Robert Baran).



Splinter hemorrhages due to cytotoxic drugs (coll. Robert Baran).



Longitudinal melanonychia due to hydrea (coll. Claire Beylot).

NAIL DISCOLORATION

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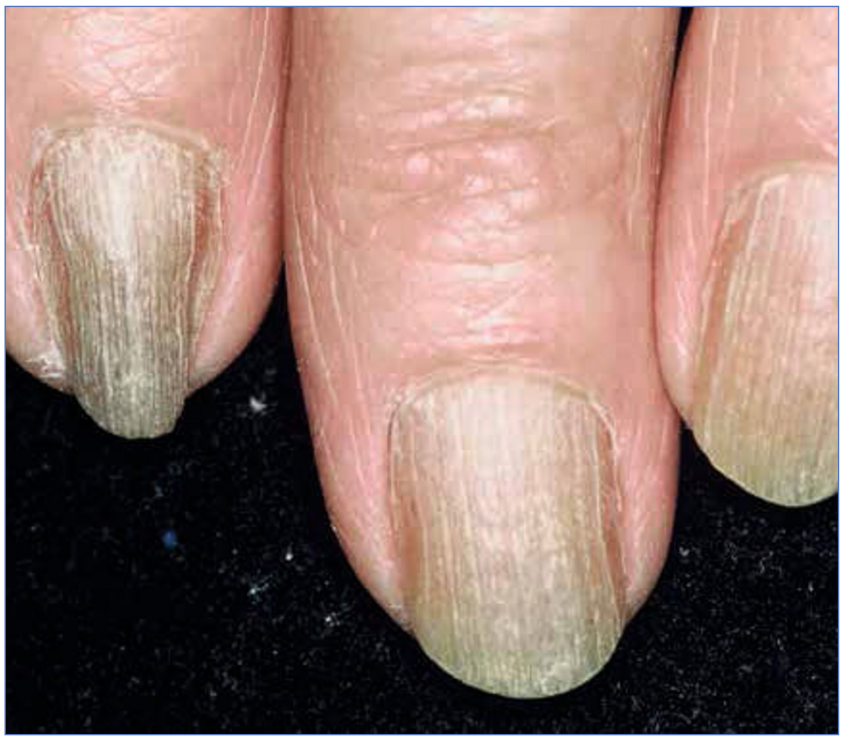
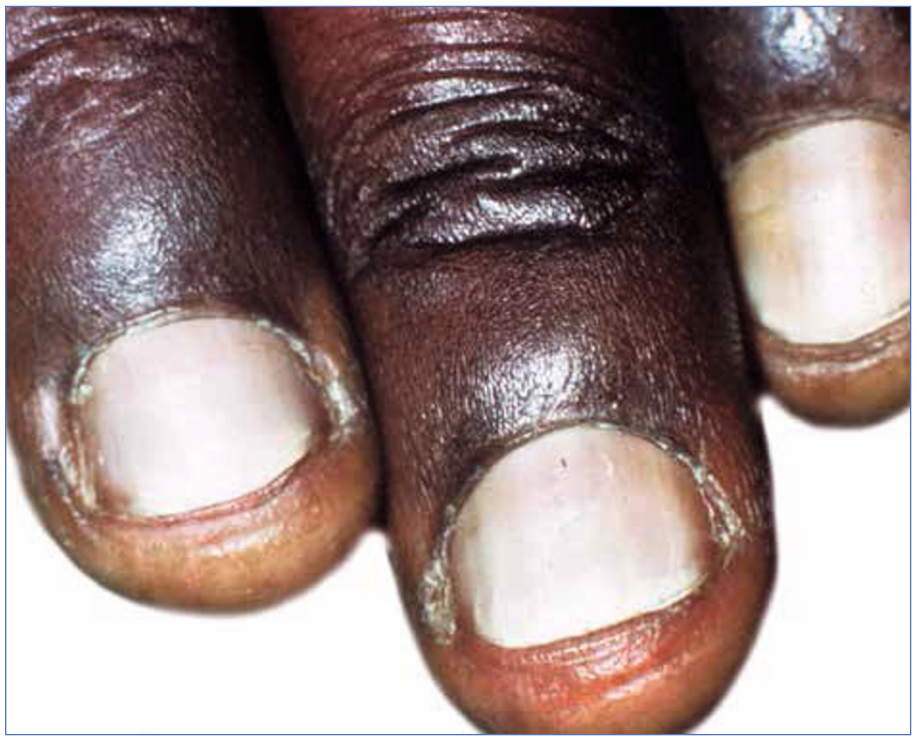
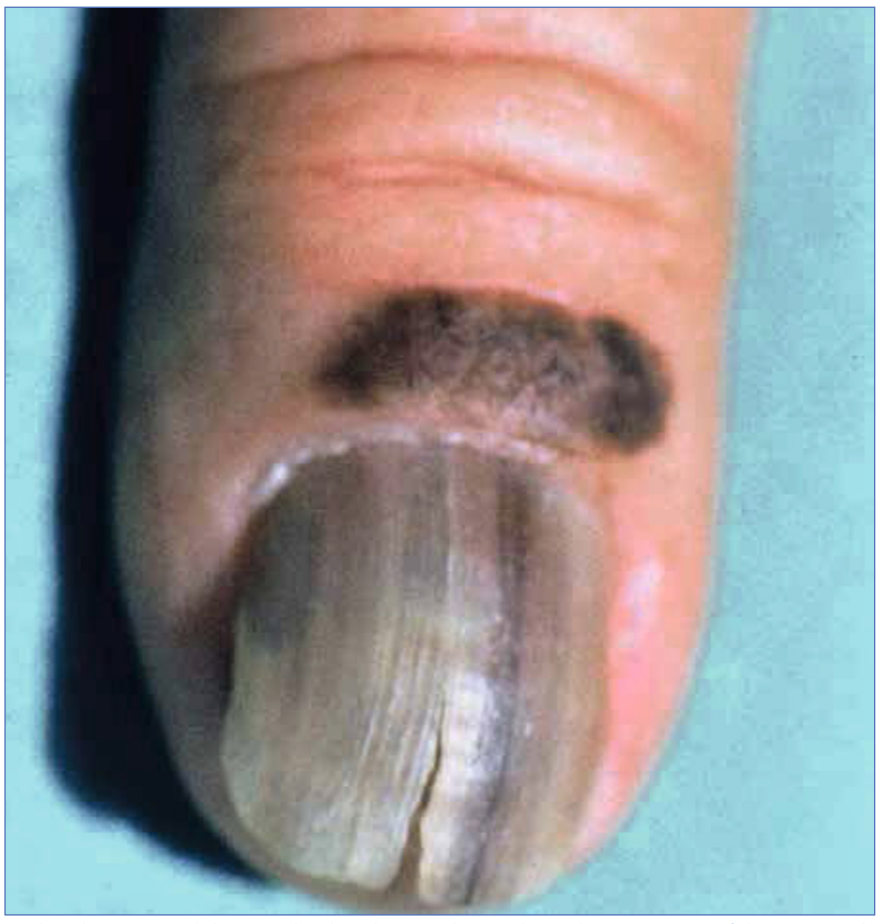


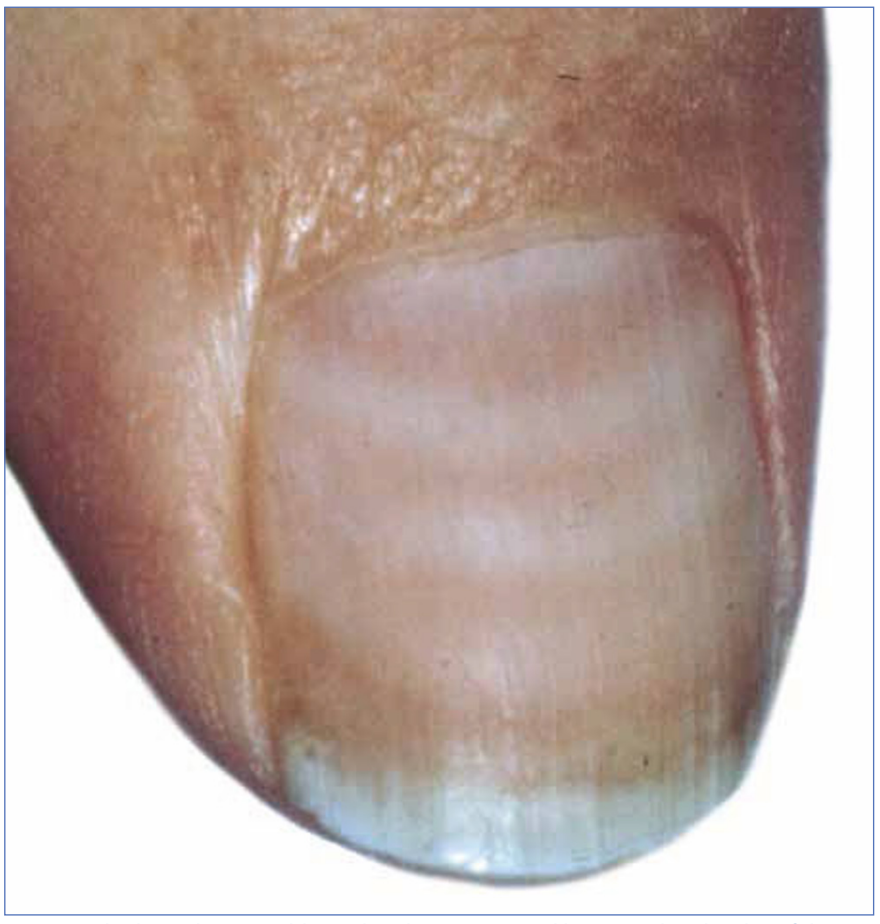
Yellowish nail with trachyonychia in lichen planus (coll. Robert Baran).



True congenital leukonychia (coll. Robert Baran).



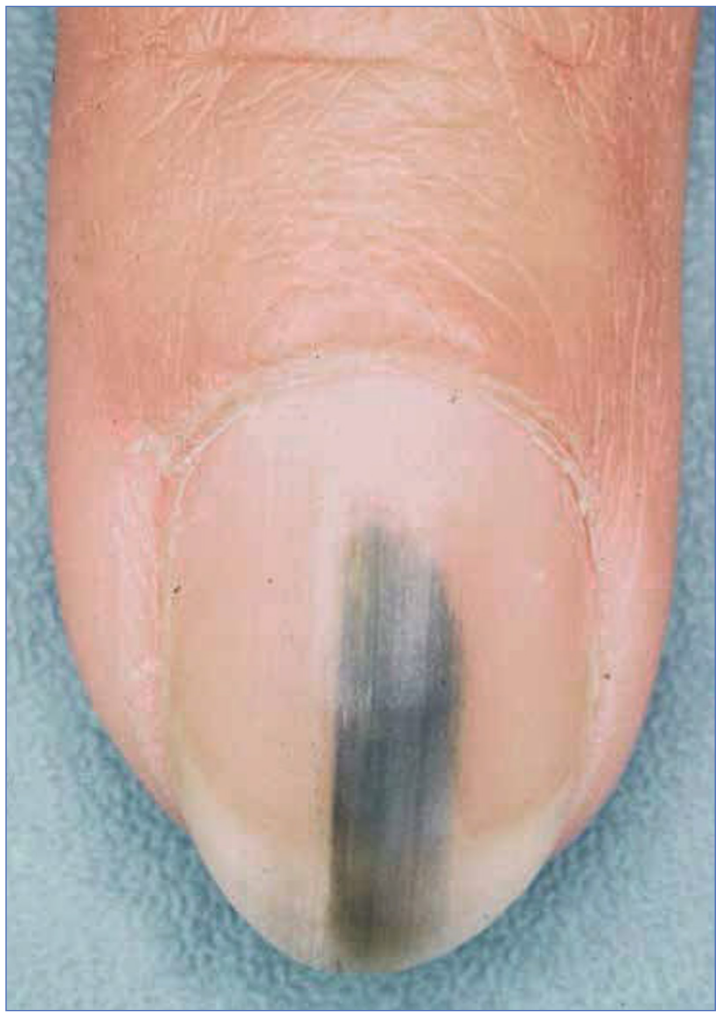
Nail melanoma with longitudinal melanonychia and Hutchinson's sign of the proximal nail fold (coll. Georges Moulin).



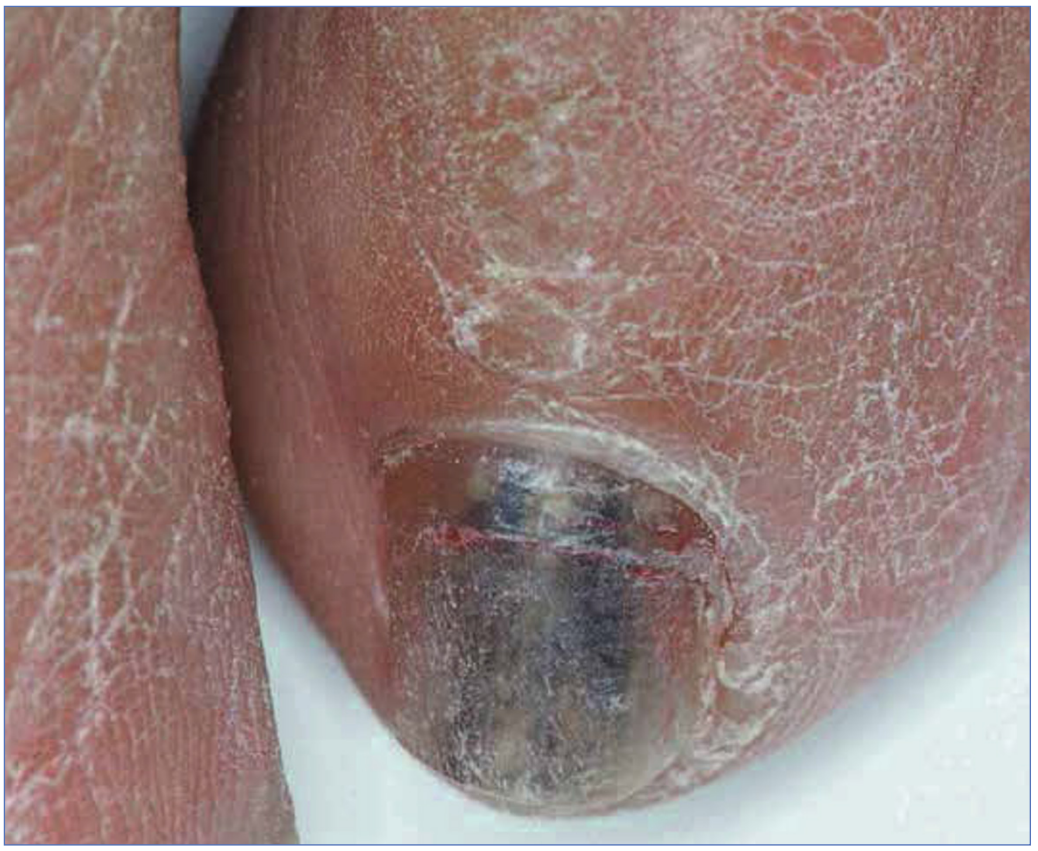
Apparent leukonychia: Muerhke's white lines separated by normal pink color of the nail bed (coll. Robert Baran).

NAIL DISCOLORATION

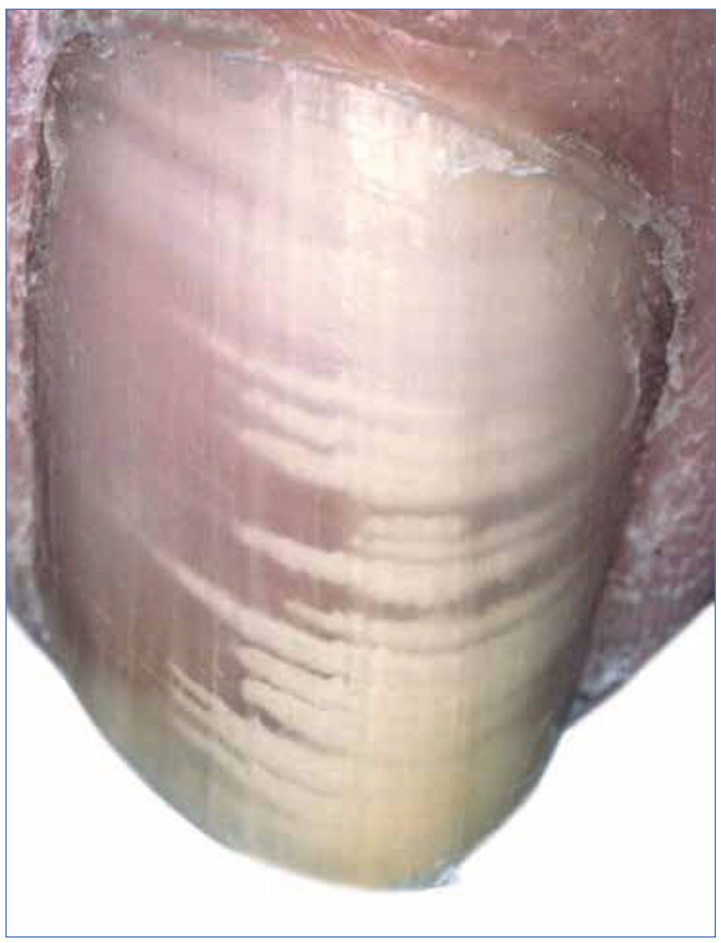
Robert Baran



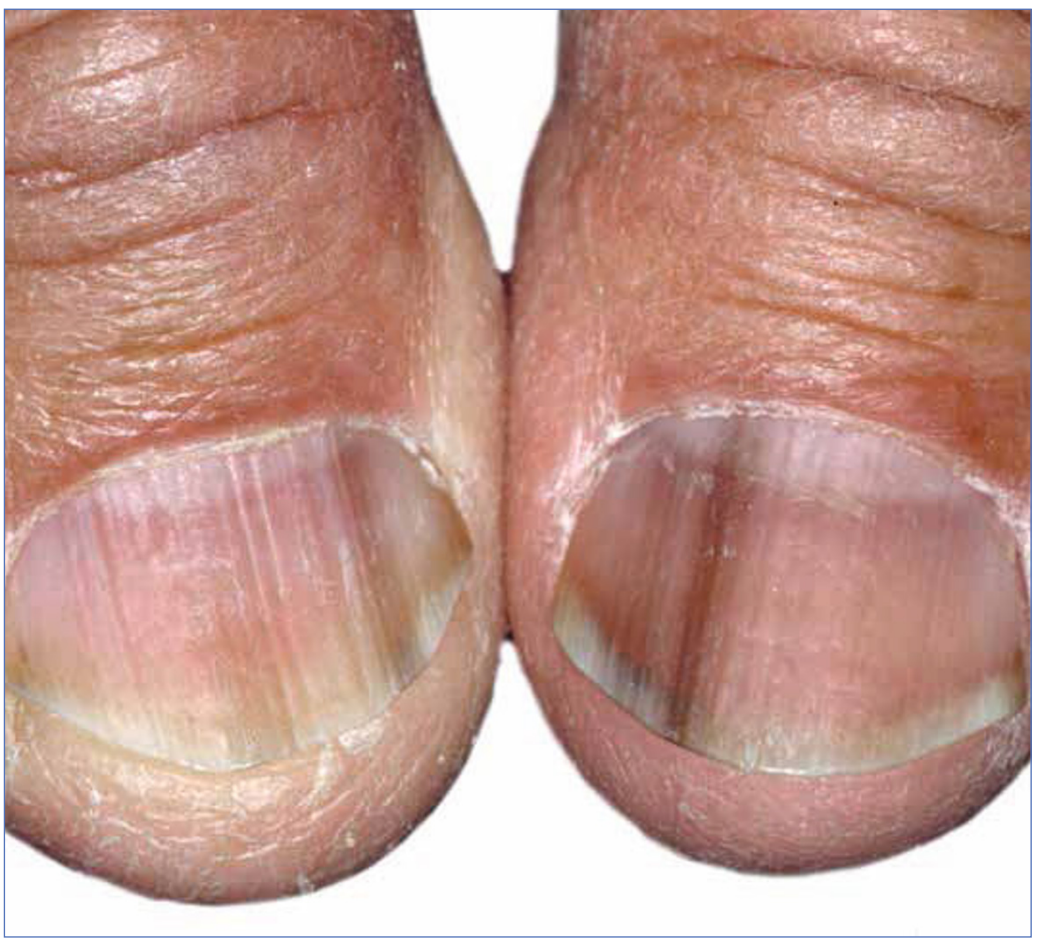
Disto-proximal longitudinal melanonychia due to *Candida albicans* (coll. Emmanuelle Viguié).



Wide longitudinal melanonychia due to *Trichophytons rubrum* (coll. Robert Baran).



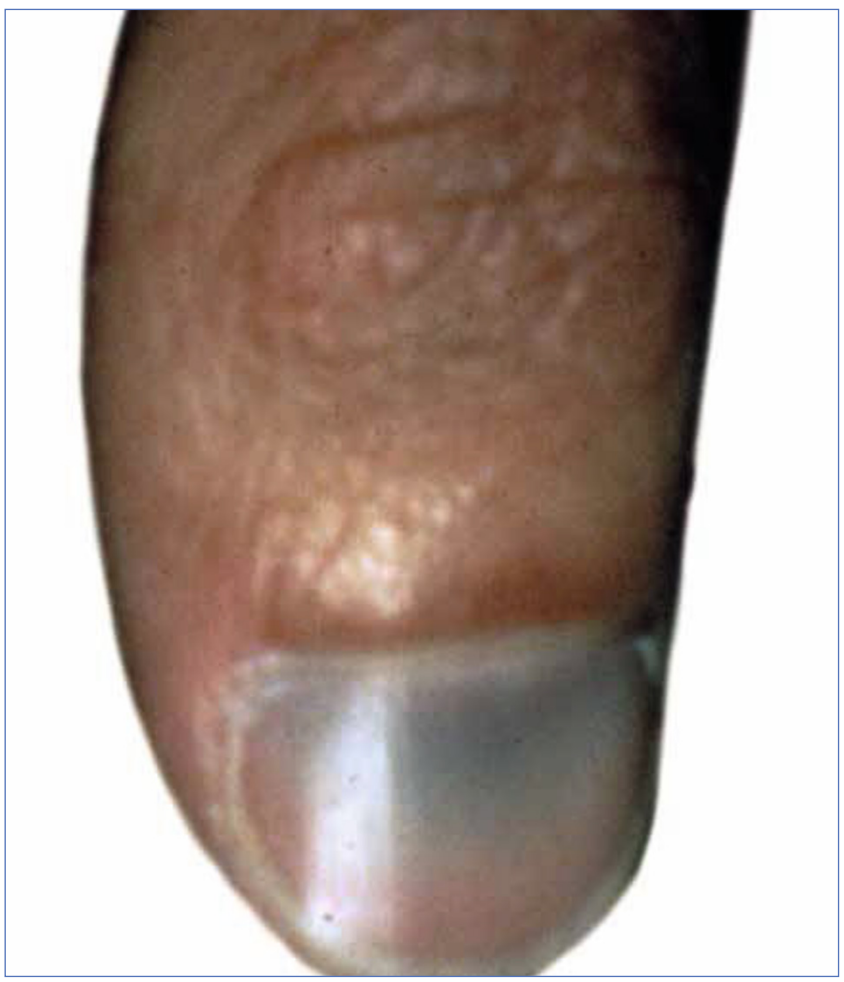
True leukonychia with multiple transverse bands due to microtrauma of the untrimmed free edge of the nail (coll. Robert Baran).



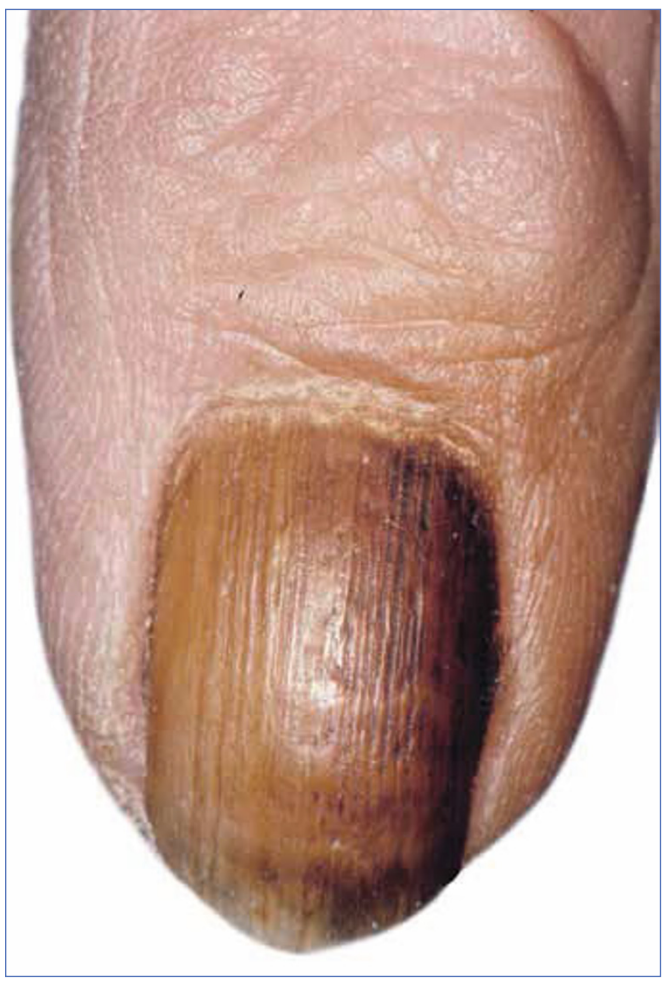
Longitudinal melanonychia due to cytotoxic drugs (coll. Robert Baran).

NAIL DISCOLORATION

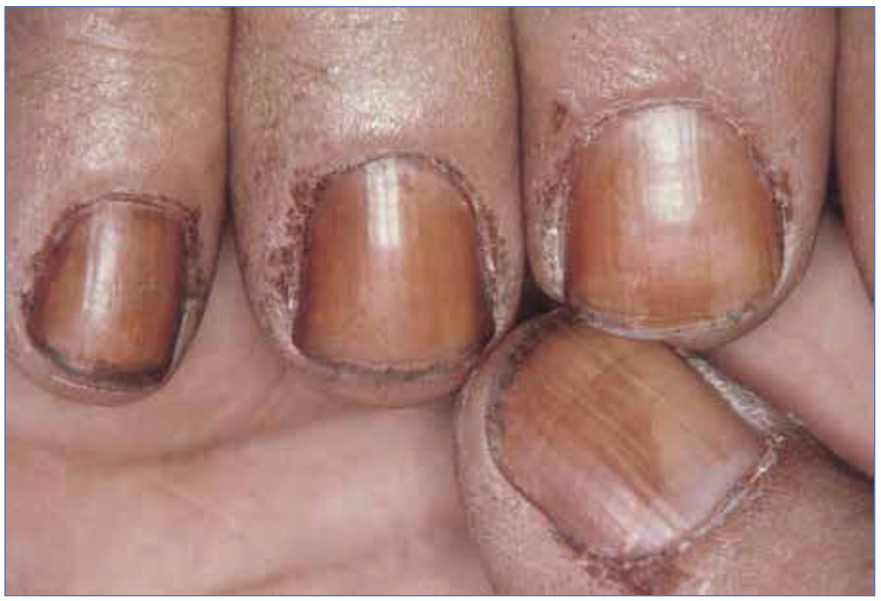
Robert Baran



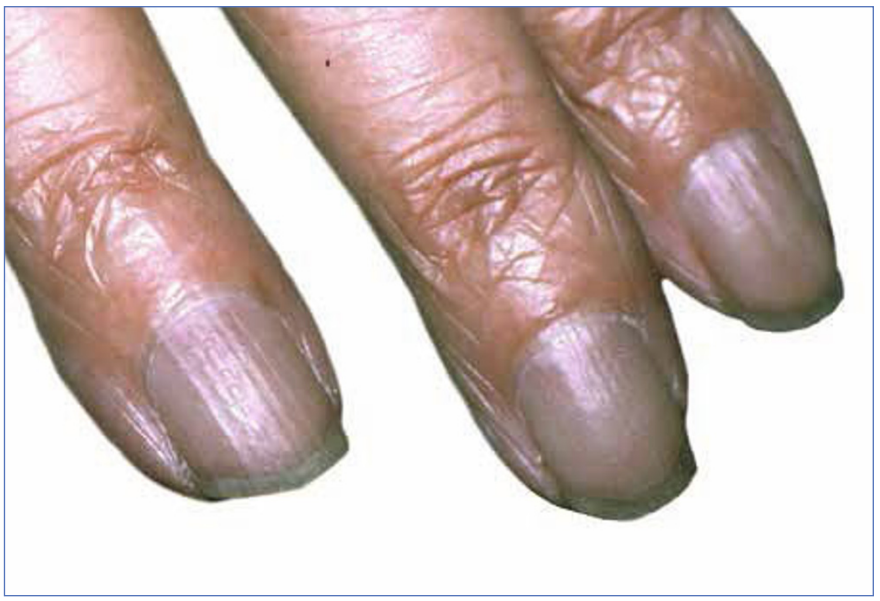
Blue spots of the nail bed. Fixed drug eruption due to minocycline (coll. Robert Baran).



Yellow-brown nail in a heavy smoker (coll. Robert Baran).



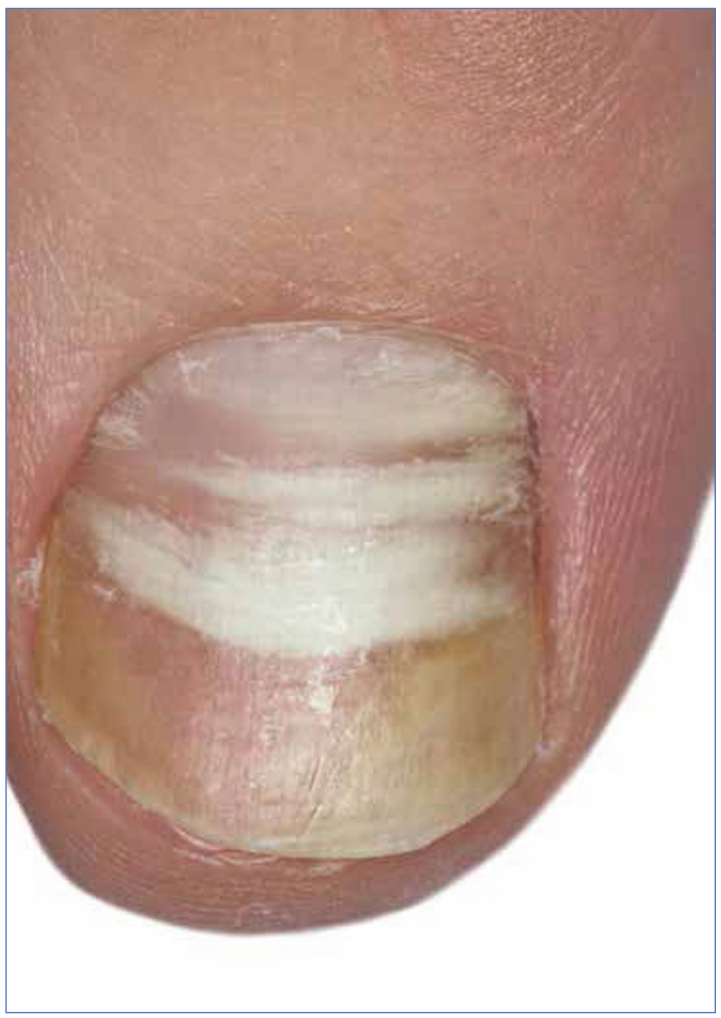
Nail pigmentation due to silver nitrate (coll. Robert Baran).



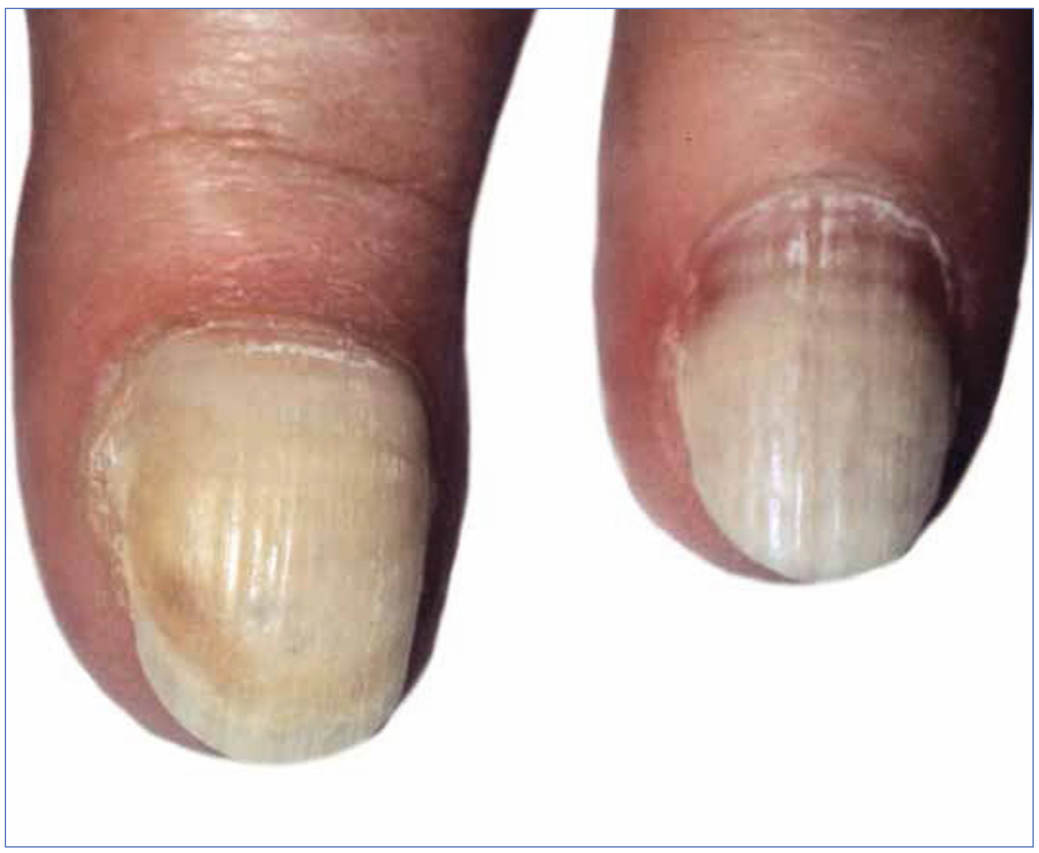
Dark nails in ochronosis (coll. Robert Baran).

NAIL DISCOLORATION

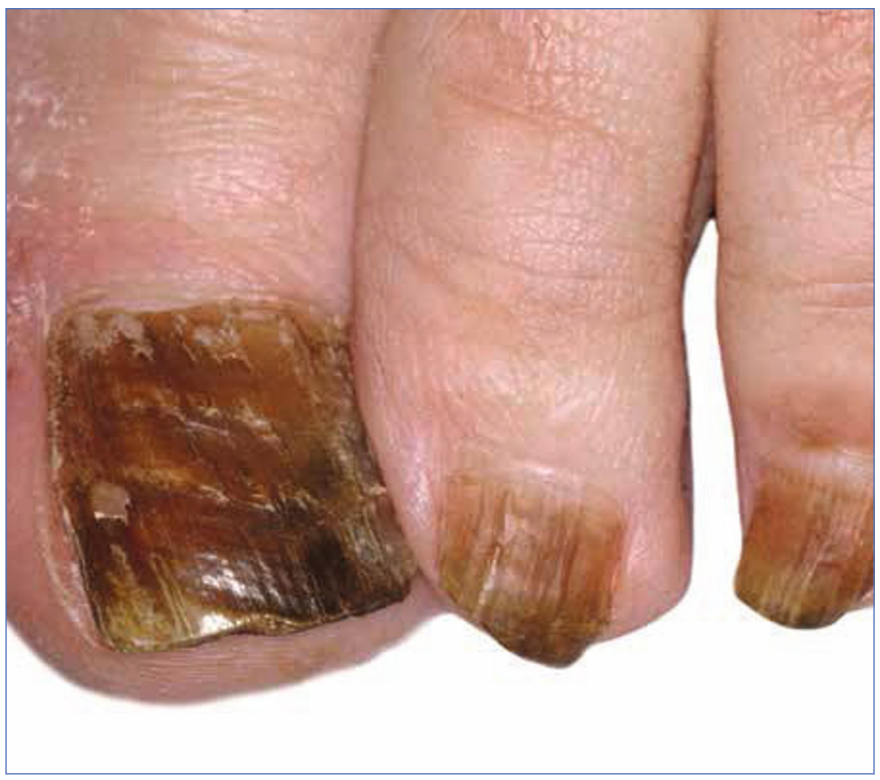
Robert Baran



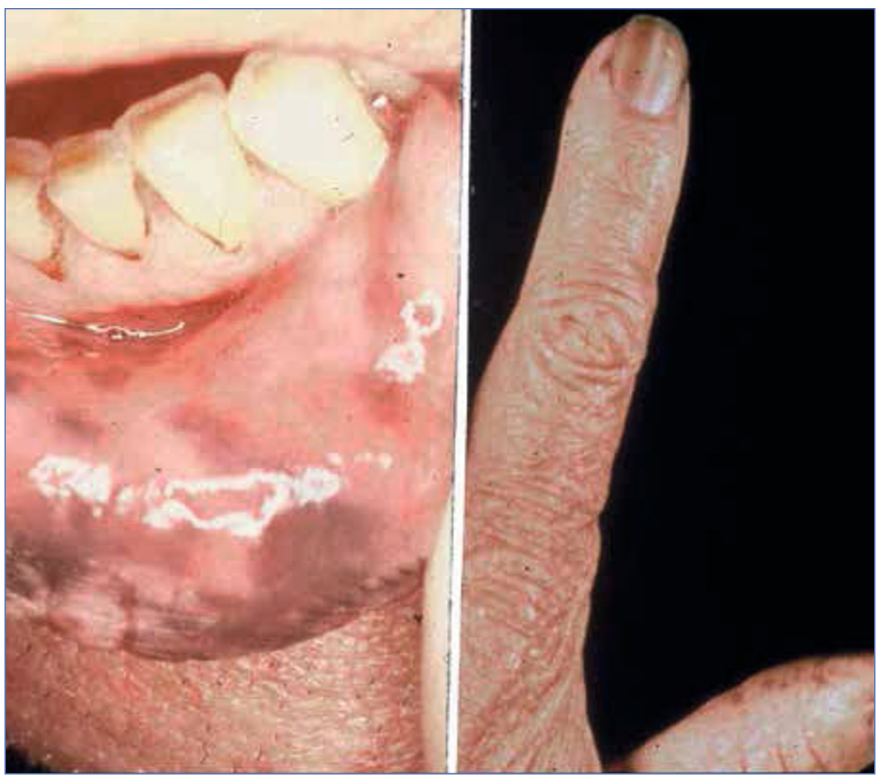
Multiple transverse pseudo leukonychia due to *Trichophytons rubrum* (coll. Robert Baran).



Onycholysis due to cytotoxic drugs (coll. Robert Baran).



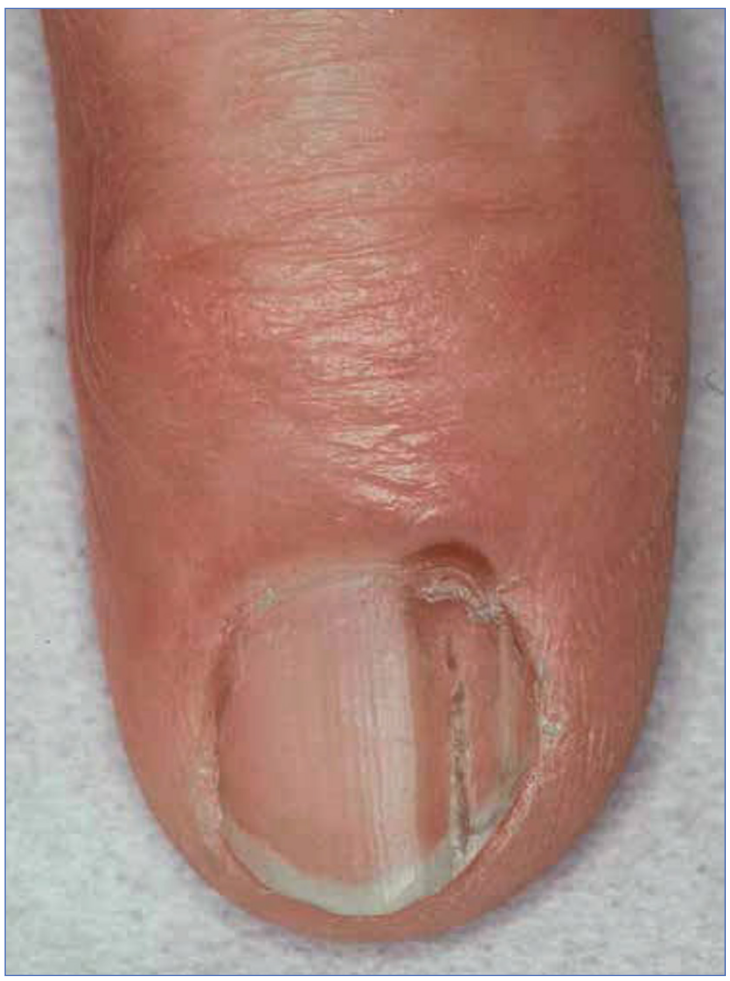
Brownish nail pigmentation due to potassium permanganate (coll. Robert Baran).



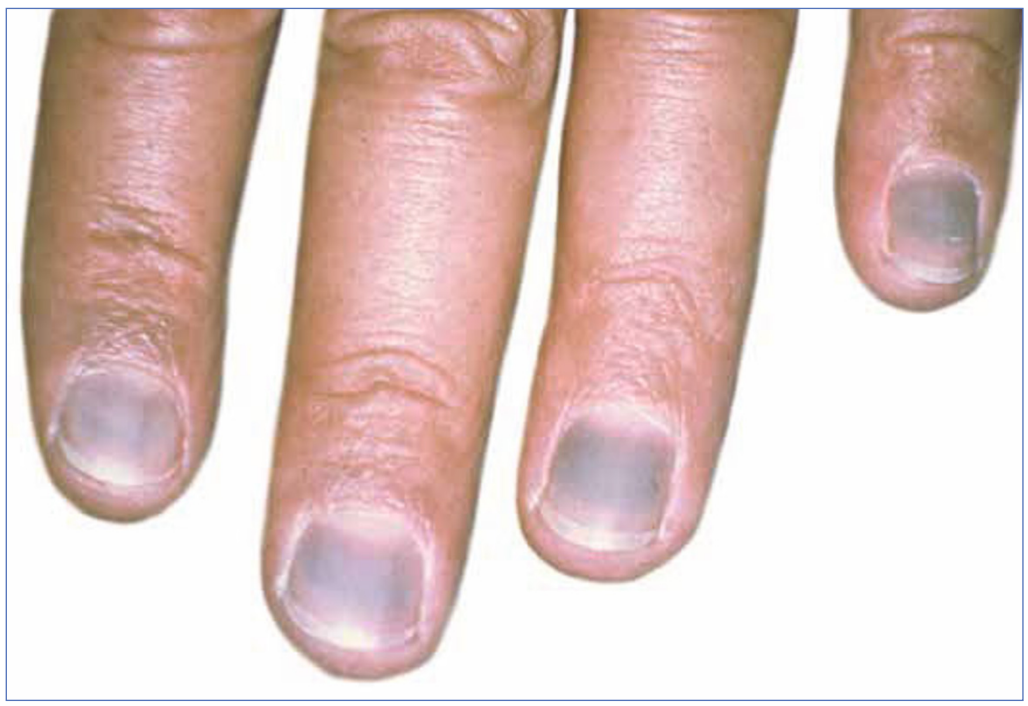
Peutz-jeghers syndrome with dark spots of the lip, longitudinal melanonychia and small dark spots of the pulp (coll. Robert Baran).

NAILS DISCOLORATION

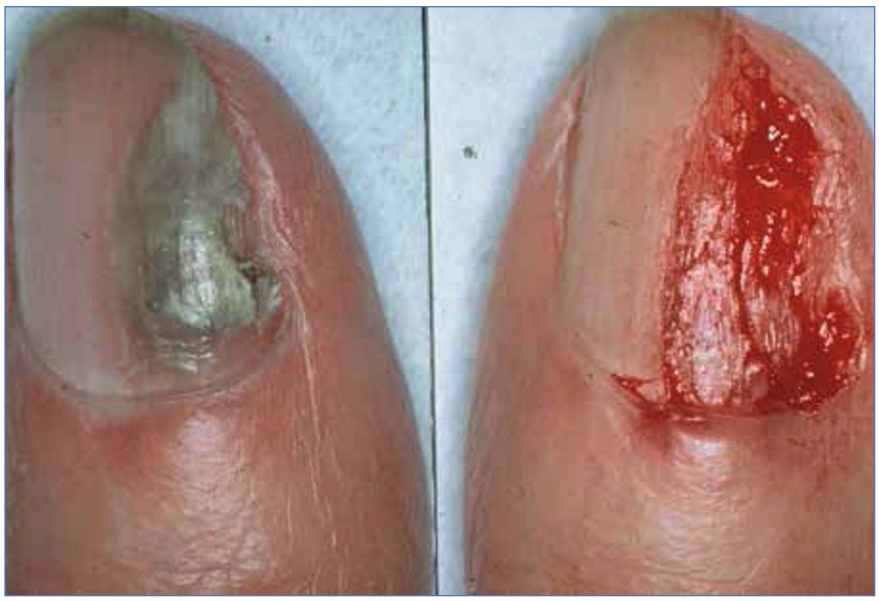
Robert Baran



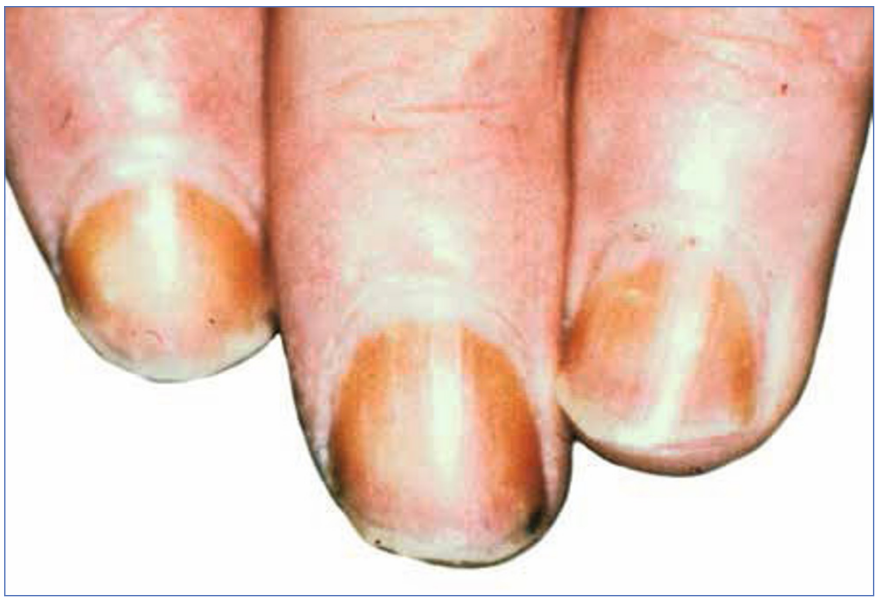
Longitudinal melanonychia due to activation of the melanocytes of the matrix in a pseudomyxoid cyst (coll. Robert Baran).



Bluish nails due to hydroxychloroquine (coll. Robert Baran).



Green nail in *Pseudomonas* infection (coll. Robert Baran).



Thermal chromonychia (coll. J. P. Ortonne).