FONDAZIONE PTV
POLICLINICO TOR VERGATA

Un caso di porfiria cutanea tarda

Dott. Sara Mazzilli Dipartimento Dermatologia Tor Vergata

♀ **40 aa**

An. familiare positiva *per malattie cardiache, k renale, ipercolesterolemia, steatosi epatica*

An.fisiologica positiva *per tiroidite* **non in trattamento**, iperprolattinemia, *< 14 kg*

An. farmacologica**:** *Etizolam 1 cpr/die da 10 aa circa*

An. patologica prossima...

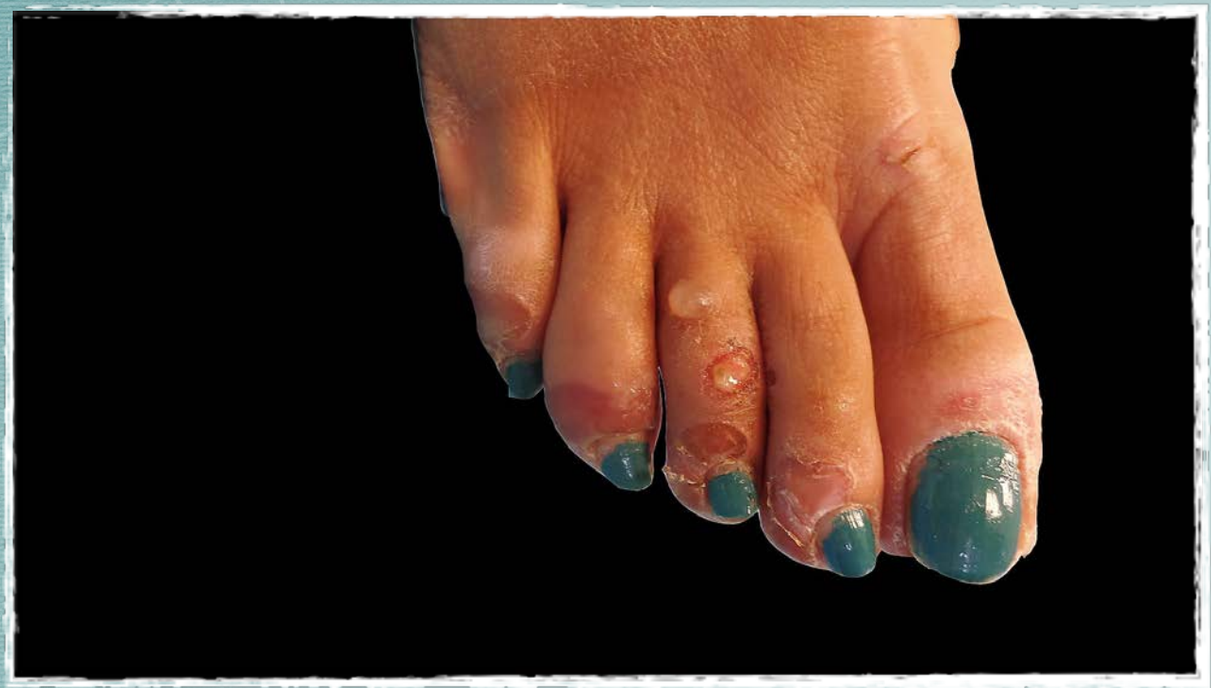
Estate 2015

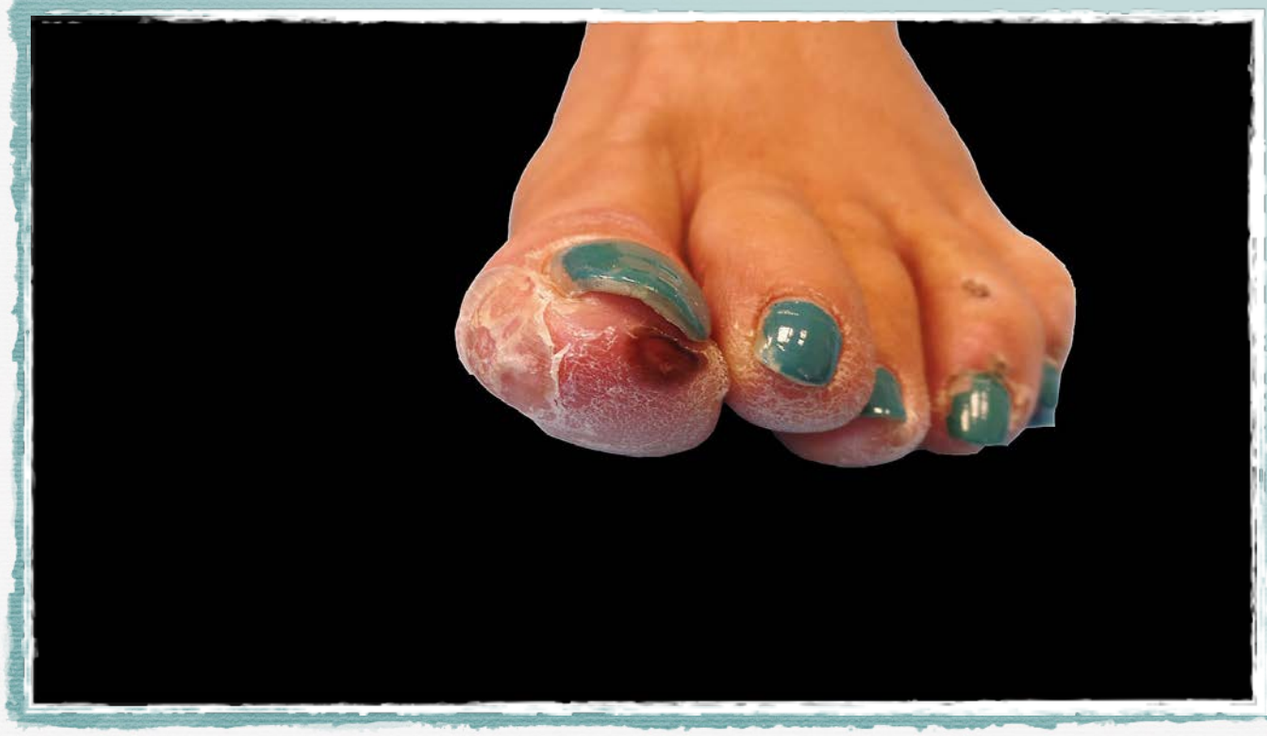
comparsa di lesioni bollose sulle mani non rispondenti al trattamento CCS topico

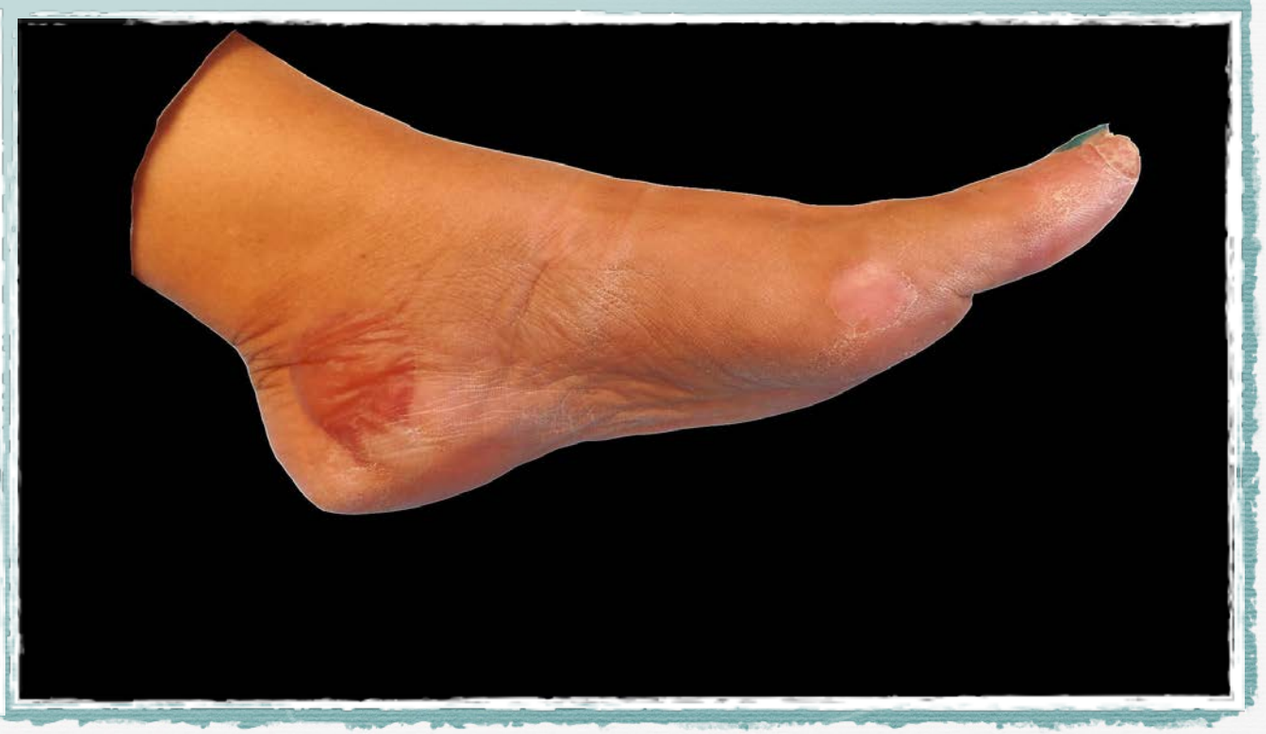
Estate 2016

comparsa dello stesso quadro sui piedi in forma di ***bolle siero-ematiche***

Settembre 2016...







Test per HBV, HCV, HAV ***negativi***.
Alt 126, ***Gamma gt 94***
Ferritinemia 318 ng/ml

nella norma…

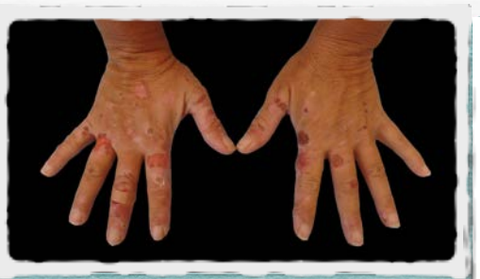
elle porfirine ematiche, urinarie, fecali, ferritinemia, transfer

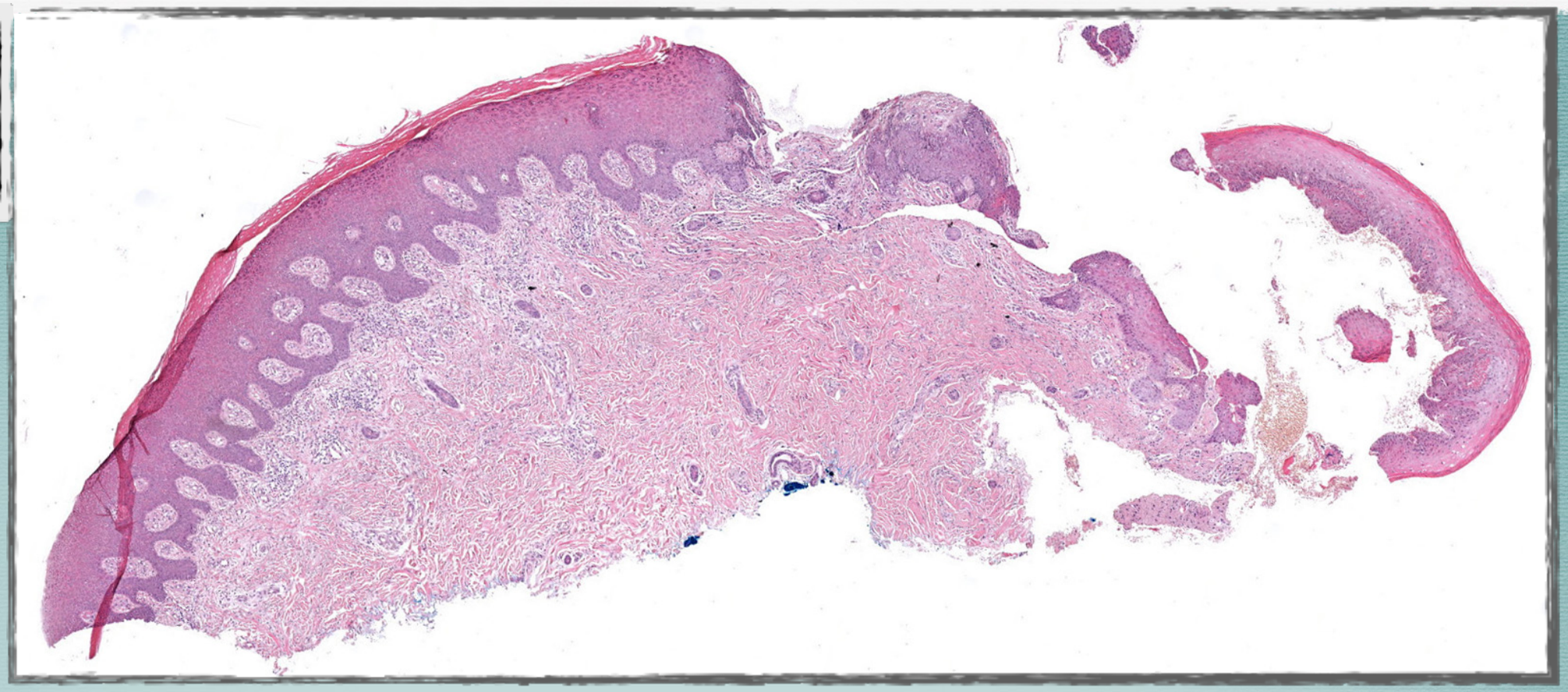
Sospetto diagnostico

- Eczema cronico delle mani
- Pseudoporfiria
- Disordini metabolici/endocrini
- Epidermolisi bullosa acquisita
- Pemfigo bulloso

- ***Porfiria cutanea tarda***

Daja S. The cutaneous porphyria Dermat Clin 2014





Cute con marcata ipercheratosi, ipergranulia, acantosi, focale distacco bolloso dermo-epidermico con necrosi dei cheratinociti basali.
Nel derma superficiale si osserva flogosi cronica specifica perivascolare con aree di sclerosi e con ispessimento ialino dei capillari e dei piccoli vasi.

PORFIRIA CUTANEA TARDA

Per gentile concessione Professor Orlandi e Professor Ferlosio

*“**Idrossiclorochina** 125 MG 2 VOLTE A SETTIMANA”*

Centro malattie rare

11 sedute di flebotomia..

- Ferritinemia
- Indici di funzionalità epatica

Nella norma

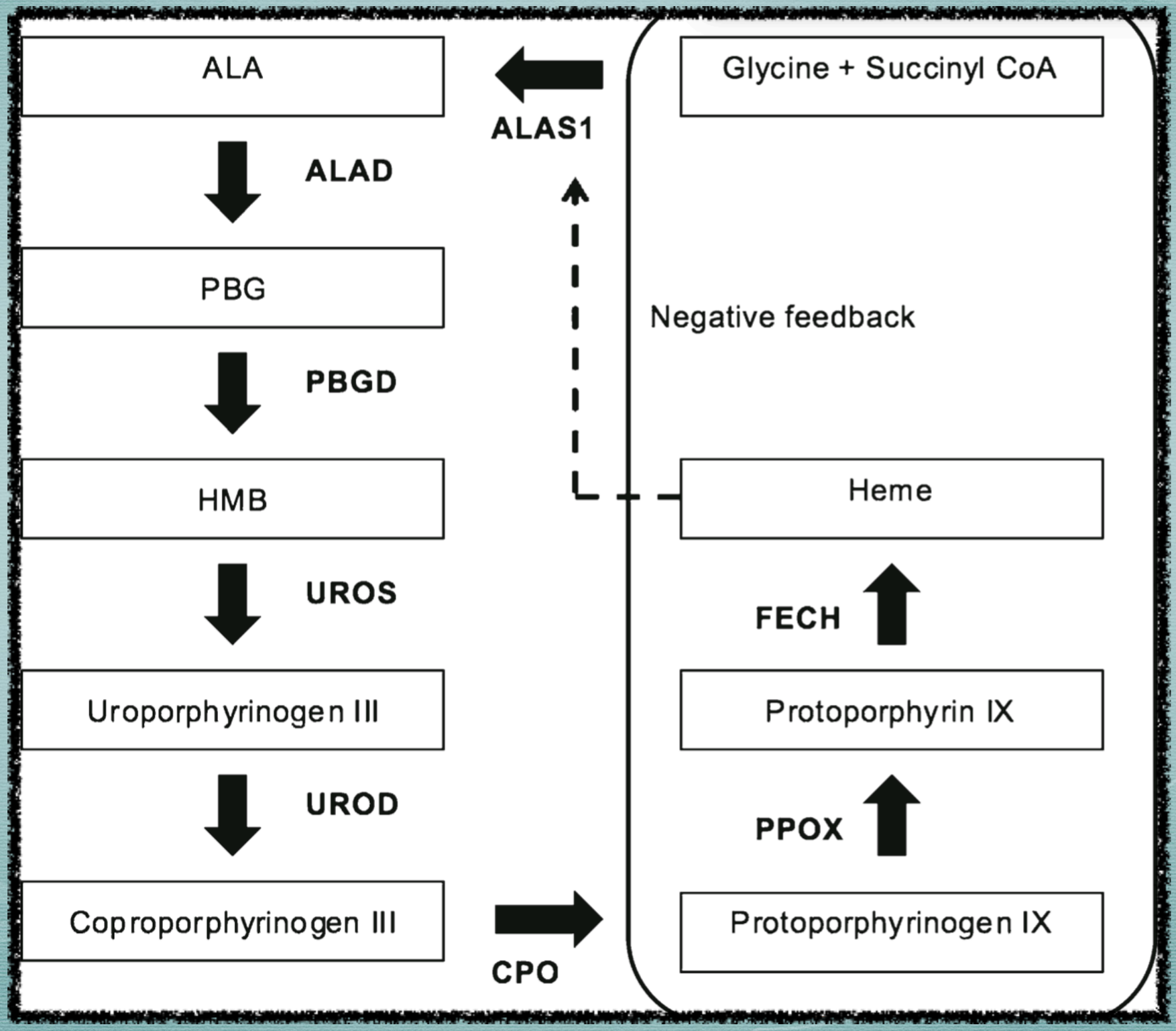
Porphyria Cutanea Tarda as the Most Common Porphyria

Vedrana Bulat, Liborija Lugović, Mirna Šitum, Marija Buljan, Lada Bradić [1]

- **Forma familiare di tipo I**
- **Forma acquisita di tipo II**
- **M/F > PCT acquisita**

Hepatic porphyria: A narrative review

Sumant Arora[1] · Steven Young[1] · Sudha Kodali[1,2] · Ashwani K. Singal[1,2]



Familial Porphyria Cutanea Tarda

Synonyms: Familial PCT; F-PCT; Type II PCT; Porphyria Cutanea Tarda, Type II

Lawrence U Liu, MD

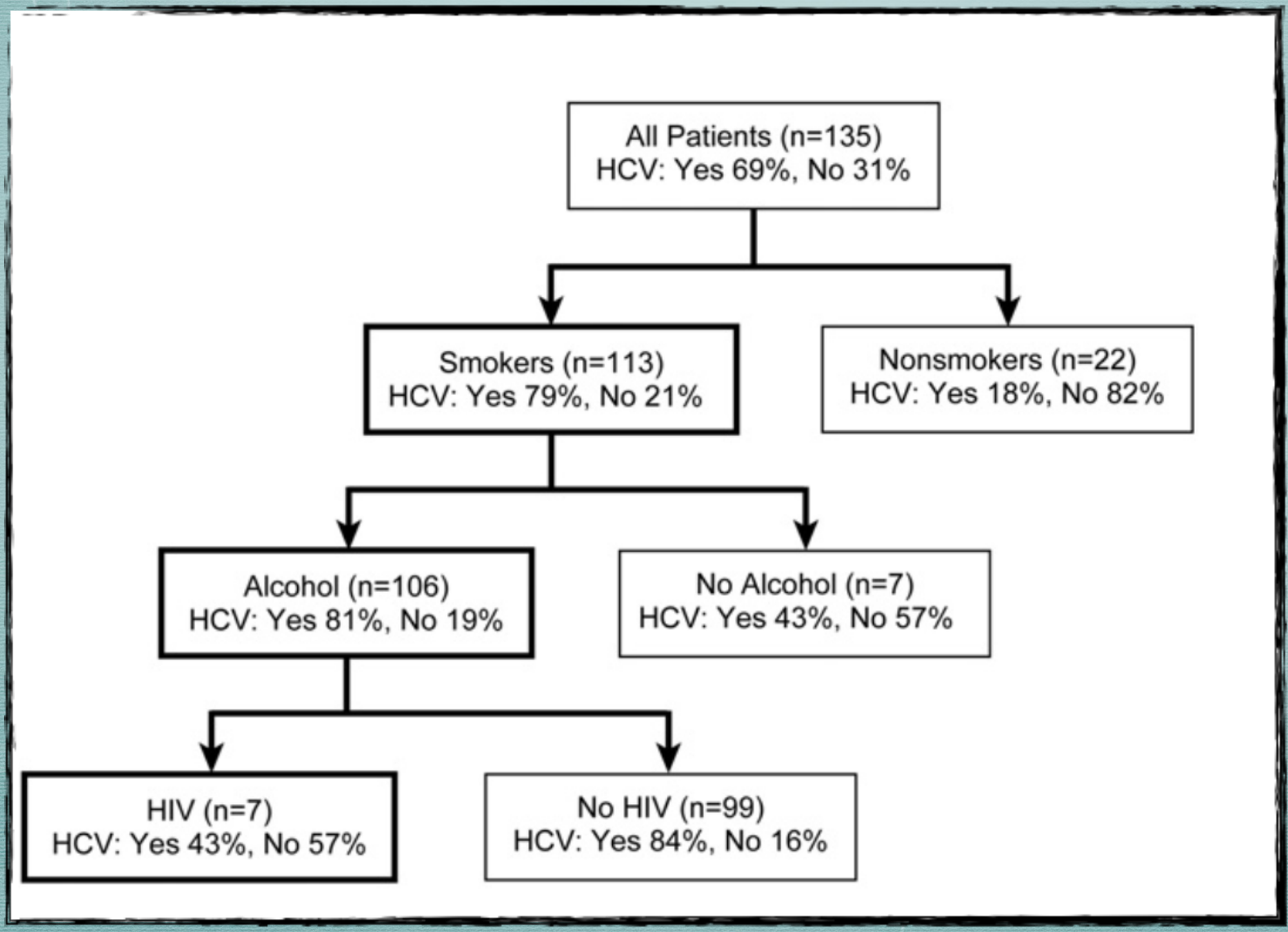
- ***HFE* pathogenic variants** that lead to increased intestinal iron absorption increase the risk of developing F-PCT.
- **Iron overload.** Mild to moderate iron overload is common in individuals with F-PCT. Some degree of hepatic siderosis is seen in almost all affected individuals. Conversely, iron deficiency has been found to be protective.
- **Alcohol.** PCT has long been associated with excessive alcohol use.
- **Smoking and cytochrome P450 enzymes.** Smoking is commonly associated with alcohol use in PCT [Egger et al 2002].
- **Estrogens.** Estrogen use is common in women with PCT [Grossman et al 1979, Sixel-Dietrich & Doss 1985, Egger et al 2002].
- **Estrogen mimetics/antagonists** (e.g., tamoxifen)
- **Toxins.** PCT has been described in those exposed to hexachlorobenzene, and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD, dioxin), chemicals that were subsequently shown to cause hepatic UROD deficiency and biochemical features resembling PCT in laboratory animals. The compounds are potent inducers of the cytochrome P450 enzymes, including hepatic CYP1A2.

- **Hepatitis C.** Reported prevalence of hepatitis C in individuals with PCT has ranged from 21% to 92% in various countries [Ryan Caballes et al 2012]; it is seen more frequently in type I PCT (sporadic) than in F-PCT [Muñoz-Santos et al 2010].
- **Human immunodeficiency virus (HIV).** PCT is associated with HIV infection, although less commonly than with hepatitis C infection [Wissel et al 1987].

- **Antioxidants.** Substantial reductions in plasma levels of ascorbate and carotenoids have been noted in some individuals with PCT [Sinclair et al 1997, Rocchi et al 1999].
- **End-stage renal disease (ESRD).** can lead to the development of F-PCT for reasons still not fully understood. The manifestations of F-PCT in persons with ESRD are usually more severe and sometimes include severe cutaneous mutilation. Lack of urinary porphyrin excretion in these individuals leads to much higher concentrations of porphyrins in plasma; these excess porphyrins are poorly dialyzable [Anderson et al 1990].

Associations Among Behavior-Related Susceptibility Factors in Porphyria Cutanea Tarda

SAJID JALIL, JAMES J. GRADY, CHUL LEE, and KARL E. ANDERSON

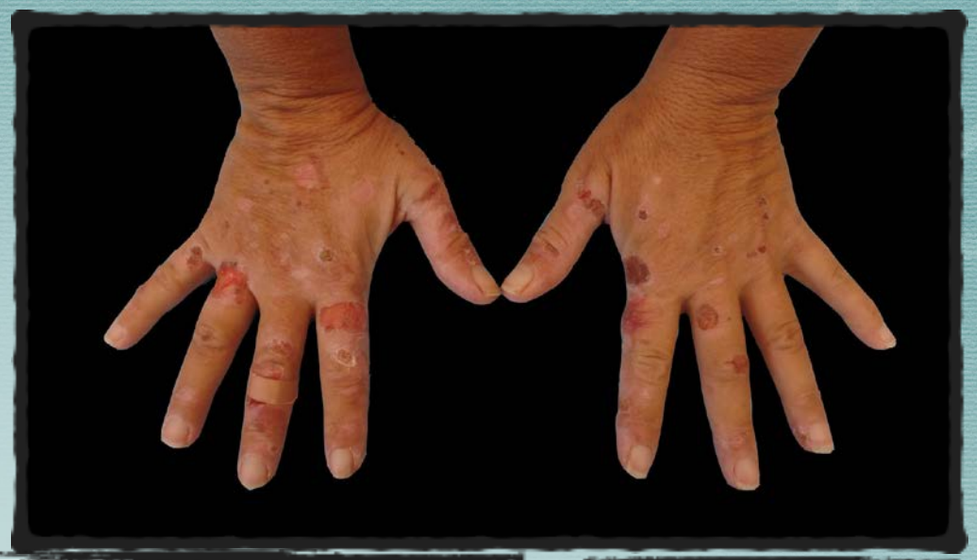


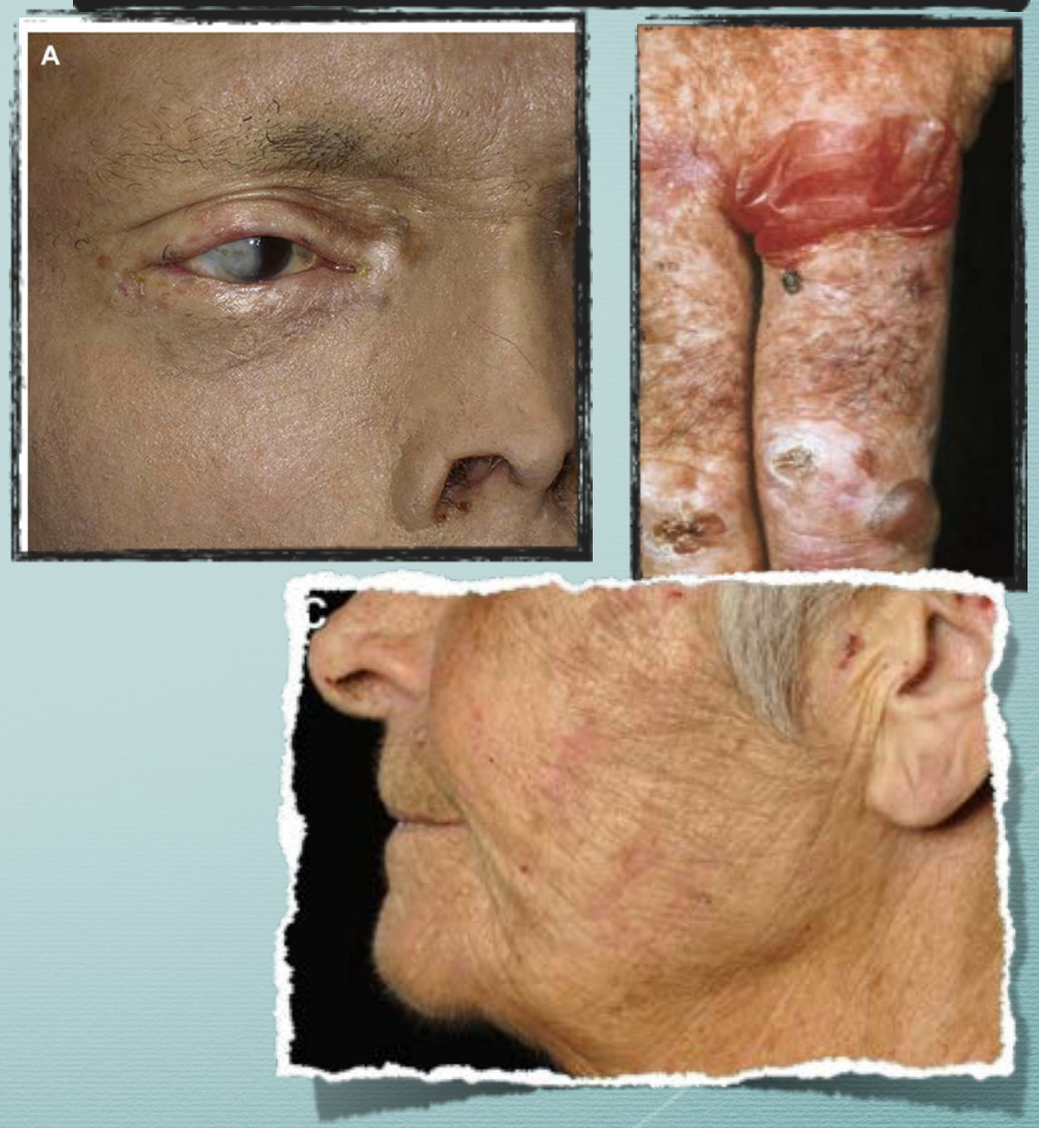
Lesioni simmetriche erosive, vescico-bollose, crostose, siero-emorragiche

Fotosensibilità

Fragilità cutanea post trauma

Ipertricosi facciale e iperpigmentazione





Cutaneous porphyrias part I: epidemiology, pathogenesis, presentation, diagnosis, and histopathology M.Horner International Journal of Dermatology 2013

The Cutaneous Porphyrias

Danja Schulenburg-Brand, MBChB, MMed (Chem Path)[a,*],
Ruwani Katugampola, BM, MRCP, MD[b], Alexander V. Anstey, MD, FRCP[c,d],
Michael N. Badminton, BSc, MBChB, PhD, FRCPath[a,e]

Derm.Clin 2014

Table 2
Patterns of overproduction of heme precursors in clinical samples

Porphyria	Plasma Porphyrin Fluorescent Emission Peak	Urine Porphyrins and Precursors	Fecal Porphyrins	Erythrocyte Porphyrins
ADP	None	ALA > PBG Coproporphyrin	Not increased	Zinc protoporphyrin
AIP	615–620 nm[a]	PBG > ALA Uroporphyrin[a]	Not increased	Normal
CEP	615–620 nm	Normal ALA, PBG Uroporphyrin I > coproporphyrin I	Coproporphyrin I	Free and zinc protoporphyrin
PCT (HEP)	615–620 nm	Normal ALA, PBG Uroporphyrin, 7-carboxyporphyrin	Isocoproporphyrin	Normal (free and zinc protoporphyrin)

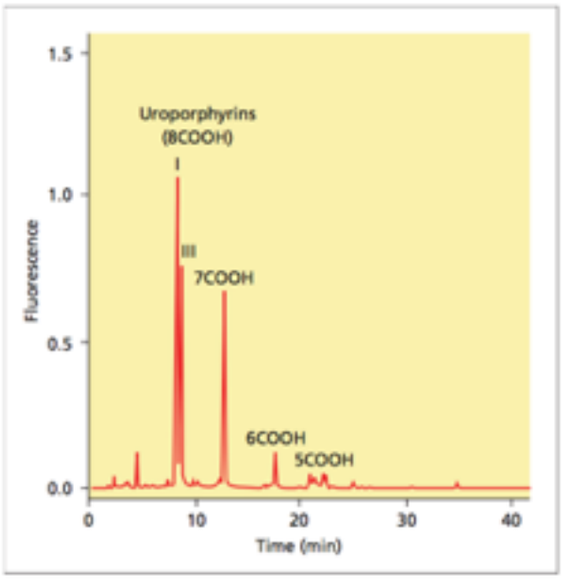
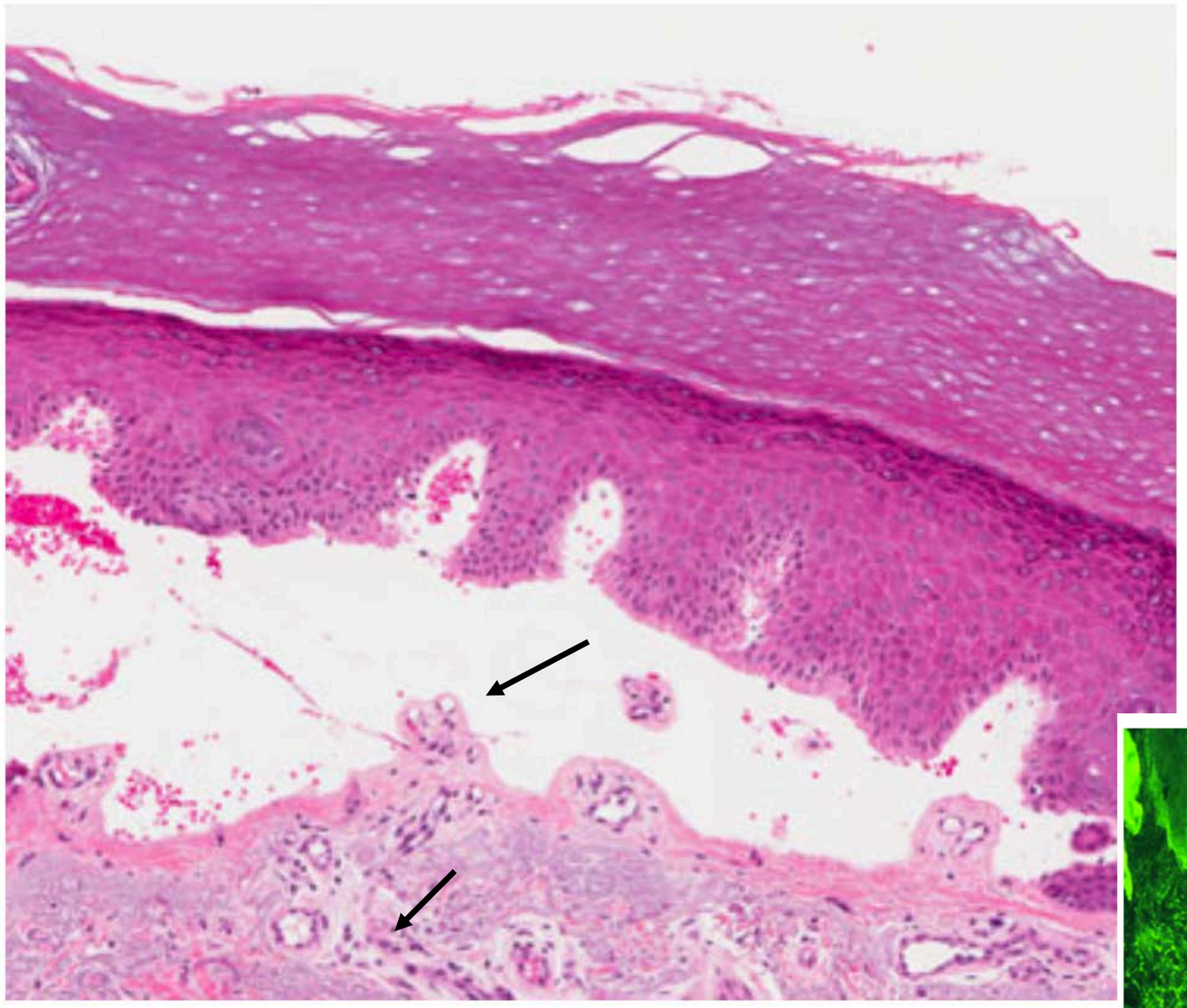
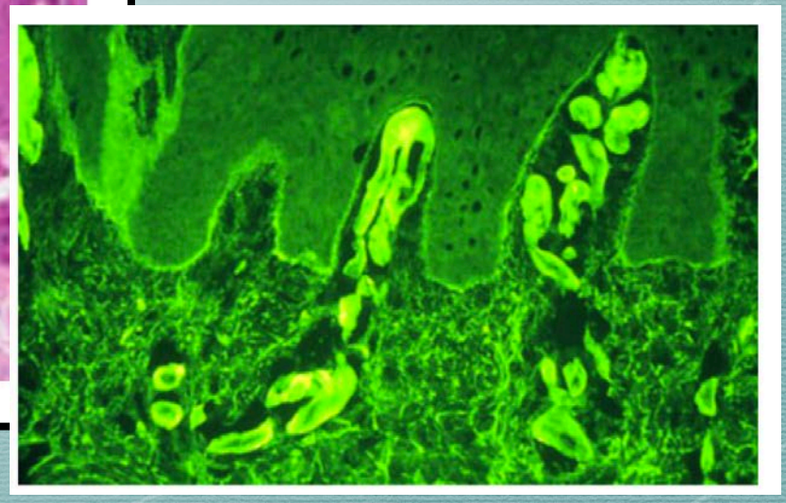


Fig. 59.6 High-performance liquid chromatography (HPLC) analysis: the more carboxylate groups it possesses, the faster a porphyrin molecule passes through the column. After passing through the column, porphyrins are detected by fluorimetry. This HPLC trace of urine shows the porphyrin profile typical of porphyria cutanea tarda (PCT). (Courtesy of Dr A. Deacon, King's College Hospital, London, UK.)

Histopathology





Cutaneous porphyrias part I: epidemiology, pathogenesis, presentation, diagnosis, and histopathology M.Horner International Journal of Dermatology 2013

Table 2 First-line treatment for porphyria cutanea tarda

Medication	Indication/effect	Evidence[a]	Recommended dose
Antimalarial (low-dose chloroquine)[b]	Reduce plasma and hepatic porphyrins	Level IIa	125 mg chloroquine twice weekly
Phlebotomy	Reduce plasma porphyrins	Level IIa	Repeated removal of 300–500 ml weekly or twice weekly as tolerated
Combined low-dose chloroquine and phlebotomy[c]	As above	Level IIa	As above
Erythropoietin	Patients with end-stage renal disease	Level III	
Desferrioxamine	Iron chelation	Level III	Subcutaneous or IV infusion over 8 h
Deferiprone, Deferasirox	Reduce plasma porphyrins	Level III	Oral 75 mg/kg/d (deferiprone) Oral 20 mg/kg/d (deferasirox)
Cimetidine	Inhibition of heme oxygenase	Level III	Oral 400–800 mg/d

Treatment Options in Acute Porphyria, Porphyria Cutanea Tarda, and Erythropoietic Protoporphyria

Pauline Harper, MD, PhD
Staffan Wahlin, MD

Treatment of PCT, sporadic and familial forms

Treatment of skin lesions

Treatment is restricted to avoidance of sun by protective clothing and opaque sunscreens, avoidance of skin trauma, and infection care.

Coexistence of hepatitis C

Patients with overt PCT suffering from hepatitis C virus infection should receive antiviral therapy. Iron depletion augments treatment response.

PCT in childhood

In familiar PCT, especially in carriers of the HFE genotype, cutaneous symptoms may present in early childhood. Preferred therapy consists of a series of small-volume phlebotomies or chloroquine dosed according to body weight.

PCT during pregnancy

Cutaneous symptoms may appear in early pregnancy and are preferentially treated by phlebotomy. In refractory cases, low-dose chloroquine may be added, as no fetal risk has been recognized. Due to hemodilution and iron depletion, symptoms typically improve with advancing pregnancy.

Removal of precipitating factors

Exposures to alcohol, estrogens, iron supplementation, or certain herbicides should be interrupted, and viral hepatitis treated.

PCT in women taking contraceptive pills or under estrogen supplementation

Stopping female sex hormone therapy often is sufficient for remission. Upon reintroduction after remission, intrauterine or transdermal therapy should be considered to reduce porphyrogenic hepatic metabolism.

PCT in patients with end-stage renal disease undergoing dialysis

Iron removal by phlebotomy or subcutaneous desferrioxamine is seldom a realistic option considering the anemia associated with chronic kidney failure. Chloroquine is unsuitable in kidney failure. Symptoms may improve by mobilizing hepatic iron stores for hemoglobin biosynthesis with erythropoietin without simultaneous iron administration. Small phlebotomies (50–100 mL) may be tried.

Porphyrins are poorly filtrated via ordinary dialysis membranes and accumulate in blood. Dialyzers with ultrapermeable membranes and with blood flow rates higher than those routinely used effectively reduce plasma porphyrin concentrations. In extreme cases, plasmapheresis should be considered.

FONDAZIONE PTV
POLICLINICO TOR VERGATA

Non-familiar porphyria cutanea tarda: a case report to suggest hints for diagnosis a rare disease

SUBMITTED