Porphyria Cutanea Tarda Still much to be learnt

Porphyria cutanea tarda (PCT) is the most common porphyria seen by dermatologists. At least in clinical practice most of us handle PCT as a well defined entity, based on clinical findings and treatment regimens. Modern research has taught us, as it so often does, that what we may have considered obvious and simple is complicated and difficult. Today we classify PCT into at least two categories, familial (fPCT), and sporadic (sPCT). In fPCT, representing 10 – 20% of all cases with PCT, mutations in the gene for uroporphyrinogen decarboxylase (UROD) can be detected. fPCT is inherited as an autosomal dominant trait, but only around 10% of all individuals carrying UROD-mutations develop disease. Associated with PCT is also the haemochromatosis related gene HFE. Forty percent of all individuals with PCT have HFE mutations, irrespective of family history or UROD mutations. As is well known, however, essentially all patients with PCT have disturbances in iron metabolism.

In this issue Anette Bygum and co-workers (p.115) report on findings in 53 Danish patients with PCT. The patients were characterised by mutation analyses of UROD and HFE, measurements of erythrocyte UROD activity, a number of clinical parameters such as extensive liver examinations including biopsies and ultrasound, infections affecting the liver, and exposure to external noxious agents and infections. Although the authors could see some tendencies, no clear-cut differences in clinical parameters could be ascribed to the presence or absence of mutations in the UROD or HFE genes. (This was with the exception of significantly lower erythrocyte UROD activity in fPCT.) Neither could any correlation between type of UROD mutation and clinical severity be found. Interestingly, patients with sPCT reported a higher intake of alcohol or oestrogen treatment, a fact that has led the authors to suggest that the clinical picture of PCT is the result of interactions between predisposing endogenous factors, one of which may be UROD mutations, and exogenous influences.

The association between skin signs in PCT and porphyrin levels is so strong that there is little doubt of a causal relationship. What we see in the skin of PCT patients could still be considered a “reaction pattern” that can be elicited by a number of factors, increased porphyrin levels being just one. The existence of “pseudoporphyria tarda” has taught us that lesson. In dermatology, PCT is in good company, sometimes frustrating but more often challenging and exciting for the dermatologist. No doubt the work by Bygum et al. and indeed other researchers in the same field will provide new valuable knowledge for the benefit not only of dermatologists but also of our patients.