Familial Background in Aberrant Mammary Tissue Is a 'Protective' Factor against the Development of Nephroureteral Anomalies

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Key Words

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In our previous survey, we discussed the clinicoepidemiological features regarding familial aberrant mammary tissue (AMT) by investigating 18 pedigrees out of a population of 156 adult Caucasian subjects [1]. Among the main questions concerning familial AMT we also briefly debated the problem about its association with kidney and urinary tract malformations (KUTM). Then, we concluded that paper with the following words: 'However, in opposition to the sporadic forms, familial AMT, in our experience, seems to be unrelated to an increasing frequency of this association' [1]. During the past 15 months we have observed and extensively studied 10 further pedigrees – recorded, as previously specified [1], by using a questionnaire and, when available, by direct examination of family members (doubtful cases were not included) – in order to further investigate the association between familial AMT and KUTM. The instrumental investigations (complete abdominal and renal ultrasound) and the laboratory tests (blood examinations, urinalysis and cultures) invariably excluded the evidence of clinically overt or occult renal anomalies in all this second series of 10 patients. Therefore, in 28 cases of familial AMT that we have examined on the whole, no KUTM has been demonstrated. Our results agree with those of Bortz et al. [2] who did not disclose any association between familial polythelia and renal anomalies by investigating, however, only one family of 4 (parents and 2 sons) affected with a left-sided supernumerary nipple. Conversely, in another report by Goedert et al. [3], 2 patients of 6 showed an overlap between familial polythelia, kidney malformations and renal adeno-carcinoma. Similarly, Toubis-Ioannou and Cohen [4] described 3 siblings (2 sisters and 1 brother) affected with left-sided polythelia and polymastia; the younger of them had also a concomitant ectopic right kidney [4]. To the best of our knowledge, in the literature there are no other studies dealing with this specific issue.

The lack of evidence of KUTM we have also observed in this second series of familial AMT could reflect the presence of some genetic factors involved in the pathogenetic mechanisms of the mammary-renal association. The male-to-male pattern of inheritance recorded in about 75% of them [1, 5] could support the existence of a peculiar mode of inheritance within familial AMT.

According to the embryo developmental field defect concept [6], the mammorenal association reflects, in fact, a common disturbance of the fetus in the so-called supernumerary nipple/renal field [7]. We may hypothesize that such genetic transmission could influence this association and, furthermore, prevent those 'noxae' from acting during embryogenesis inside the polytopic fields involved and, finally, from causing concomitant nephrourological abnormalities.

On the other hand, it has been well documented that the association between AMT and KUTM is greatly influenced by racial [8], and ethnic and geographic differences [9]. Rahbar [10] and Robertson et al. [8] have recorded no renal anomalies in black neonates and infants with supernumerary nipples, Hungarian authors [11, 12] found a very high prevalence of KUTM in their pediatric series, while different conclusions are reported from Israel where various ethnic origins are present [9, 13].

By evaluating our results, the presence of a familial background in the subjects affected with AMT may be considered a further intrinsic protective factor against the development of congenital and hereditary nephrourological defects.

These data are conflicting if compared with those concerning the sporadic forms of AMT that are characterized, on the contrary, by a significant association with KUTM [14] (presently: 16/167, 9.58%).

Therefore, the detection of a patient presenting with AMT should always alert the physician for a careful approach – including also a detailed family history – and prompt complete abdominal ultrasound examination to exclude early the occurrence of KUTM.

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A Chinese Cream (Fù Suo) for Psoriasis

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Key Words

Psoriasis · Chinese drugs ■ Miconazole · Toxicity

Chinese herbal medicines are more and more used and they need clinical and pharmacological evaluations. Numerous reports alerted to the potential toxicity [1 -4]. Other products with the 'Chinese' label are marketed without evaluation and contain in fact drugs widely used in Europe. Such products are difficult to detect or to identify on the packages. We report the toxicological analysis of a cream a Chinese patient used to treat her psoriasis with while she stayed in Shanghai, China.

A 66-year-old Chinese female had lived in France since the Cultural Revolution. She was depressed since then and treated by clonazepam, levomepromazine and tianeptine. She had had psoriasis since 1976 and was treated by a Chinese herbal therapy which caused hepatic toxicity. PUVA was used effectively from 1984 to 1994. In May 1994, she returned to China and a flare of her cutaneous disease was treated by a cream which was poorly active after 4 months. She was subsequently controlled by topical calcipotriol.

Ten milligrams of the cream were solubilized in 1 ml methanol and studied by gas chromatography (Hewlett-Packard 5890 II)/mass spectrometry (GC/MS; Hewlett-Packard 5972 A) and by high-performance liquid chromatography/UV diode array detection (HPLC/ DAD; Shimadzu SPD M10A, Touzart et Matignon, France). About 400 drugs, belonging to 32 classes of drugs are recognized using these methods. Chromatographic retention indices and mass or UV spectra of the drug to investigate are compared with those of each drug contained in the respective PC computer libraries. A more sensitive method for hydrocortisone determination by HPLC/DAD was also used. The analysis of the excipient was completed by another GC/MS method using direct injection on a Nukol® capillary column (Supelco, France) designed for separation of glycols and other alcohols.

Only miconazole was found in the cream, by both GC/MS and HPLC/DAD. Hydrocortisone was absent. The excipient was mainly composed of glycerol. The search of propylene glycol was negative. The cream was then different from Daktarin® or Daktacort® which are the commercial forms of miconazole in France.

We clearly identified an imidazole compound in the cream. Miconazole is a treatment for fungal infections and is not effective for psoriasis. However, our patient was satisfied with that treatment in so far as a topical Chinese cream is not effective before 3-4 months of use, which was what she observed. The cream we analysed was dif-

ferent from the French marketed drug. As miconazole is largely used, it is not surprising to find it in another commercial form.

Our aim was primarily to investigate a Chinese specific product. Chinese drugs or herbs are more and more used and toxicity is a risk to their use. Skin, hepatic, renal and immunosuppressive

adverse effects have been published [1–4], and our patient experienced hepatic toxicity. Another type of adverse effects is due to the mixture of usual drugs with Chinese tablets leading to well-known reactions, such as Cushing disease with dexamethasone [5]. So it is interesting to analyse every product to evaluate its composition and its possible toxicity, particularly if these are sold without controls.

The methods we used are sufficiently specific to analyse most of the usual marketed drugs. They permit the analysis and the recognition of the drug contained in the cream. In our case, the drug was not indicated for psoriasis. The international commercial denomination of the drug was not indicated on the box. This raised the potential hazard of toxicity when using such topical agents with unlabelled packages.

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Pustular Drug Eruption Induced by Ferrous Fumarate

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Key Words

Ferrous fumarate · Pustular drug eruption ■ Acute generalized exanthematous pustulosis · Generalized pustular psoriasis

Although ferrous agents are commonly used clinically, they rarely induce allergic skin eruptions. Moreover, drug eruptions of the pustular type are uncommon and include simple pustular drug eruption, acute generalized exanthematous pustulosis (AGEP) [1] and generalized pustular psoriasis (GPP) [2]. Here, we describe a case of pustular drug eruption induced by ferrous fumarate.

A 36-year-old woman was first seen at our clinic on September 14, 1994, because of a generalized exanthematous pustular eruption. She had been given ferrous fumarate (Ferrum®), carbazochrome sodium sulfonate (Adona®) and tranexamic acid (Transamin®), because of