



Fig. 3. Case II. Skin lesions (erythema, scars) are observed in association with the chromonychia. Structural abnormalities of the nail plate are present.

injury. Thus, heat must be considered as a further possible cause of chromonychia. Nevertheless, the pathogenesis of the nails in our 2 patients probably corresponds to two different mechanisms.

In the first case, no onycholysis occurred. Hyperpigmentation probably did not involve the structure of the nail bed. One may suggest that the changes in colour involved only the nail plate and were thus related to chemical modifications induced by heat.

In the second case, onycholysis preceded the hyperpigmentation. Changes in colour after onycholysis are common. Ultrastructural study in one case of photo-onycholysis induced by 8-methoxypsoralen showed that the hyperpigmentation was related to extravascular deposits of hemosiderin (3). Photo-onycholysis induces alterations in the walls of the blood vessels. The same phenomenon was probably present in case 2. Heat induced bulla formation of the nail bed. According to the description of the bullae, numerous erythrocytes were extruded from the blood vessels to the nail bed.

Thus, more than one mechanism may be involved in the pathogenesis of chromonychia following thermal injury.

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Malignant Dermal Eccrine Cylindroma

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Malignant degeneration of dermal eccrine cylindromas is extremely rare. Only six cases are on record (1-6). Here an additional case is described.

CASE REPORT

A 96-year-old woman had 2 months previous to admission noticed a nodule on one of her thighs. The lesion then grew rapidly. Otherwise she felt well and there was nothing remarkable in her history. Examination revealed a walnut-sized bulging tumour covered by ulcerated skin. The excised tumour appeared to be solid and rather well circumscribed. The cut surface was reddish grey with brownish haemorrhagic and necrotic areas (Fig. 1). Microscopically some parts of the tumour showed a characteristic appearance with numerous irregularly shaped islands composed of uniform small basophilic cells and surrounded by hyalin sheaths (Fig. 2). Occasionally two types of cells could be distinguished: one with small dark nuclei in a palisade arrangement at the periphery of the islands and another with larger, pale nuclei in the centre. The surrounding hyalin was weakly PAS-positive. In other parts of the tumour this architecture underwent a disorganization accompanied by loss of hyalin and increasing cellular atypia. Thus, there was a gradual transition to areas with anastomosing cords and large masses composed of markedly pleomorphic cells with numerous mitoses (Fig. 3). In these areas lymphatics were invaded by the tumour (Fig. 4).

COMMENT

The histologic picture of well differentiated parts of this tumour is consistent with a dermal eccrine cylindroma. Malignant degeneration is evident from

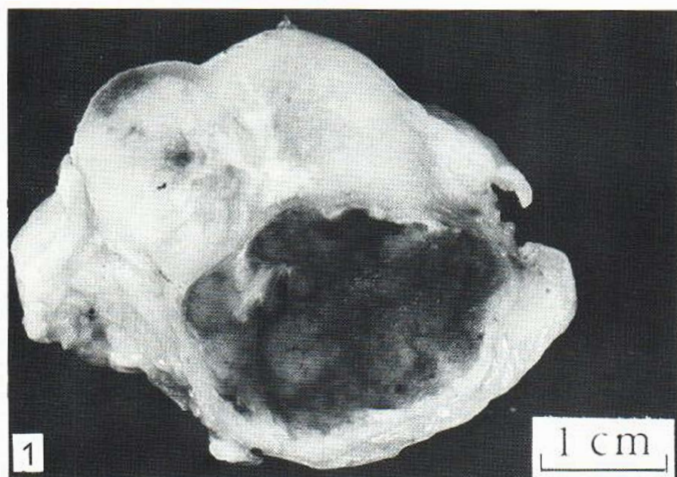


Fig. 1. Cut surface of the tumour.

Fig. 2. Well differentiated area with uniform cells in islands surrounded by hyalin sheaths (haematoxylin-eosin, $\times 260$).

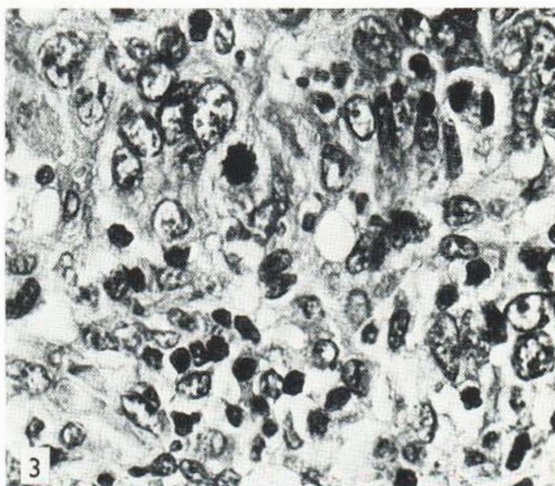
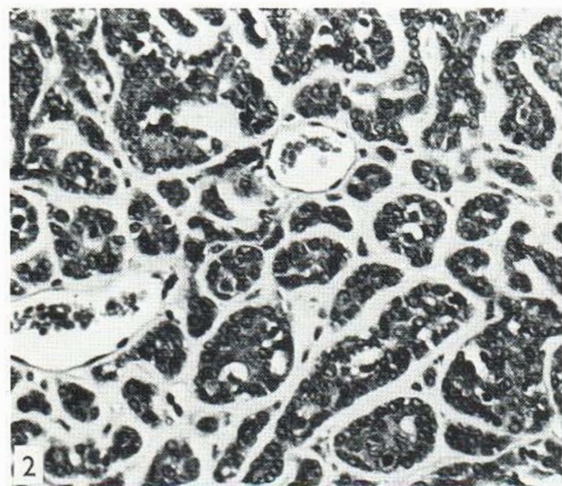


Fig. 3. Poorly differentiated area with markedly anaplastic cells and mitoses (haematoxylin-eosin, $\times 640$).



Fig. 4. Lymphatics invaded by tumour (haematoxylin-eosin, $\times 80$).

the transition to markedly anaplastic areas with invasive tumour growth. Only six other cases of malignant tumours of this kind are on record (1-6). All of these emanated from longstanding "turban tumours" with multiple cylindromas in the scalp, as distinguished from this case which appeared as a solitary lesion on an extremity. Owing to the patient's advanced age no search was made for possible metastases.

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