## **Cicatricial Alopecia Following Therapeutic Embolization**

Sir,

Selective embolization is used pre-operatively for highly vascular tumours, for treatment of vascular malformations and for treatment of bleeding. The morbidity rate of this technique is less than 1% (1, 2). Skin necrosis is described as an uncommon and minor adverse effect. We present a case of cicatricial alopecia following intravascular embolization for incoercible bleeding of the nose.

### CASE REPORT

A 64-year-old woman, with an unremarkable past history was hospitalized for persistent epistaxis. After unsuccessful nose packing, surgical exploration and cauterization, therapeutic embolization was performed. Hyperselective catheterization of the right facial artery and the branches of the maxillary artery (external carotid branches) allowed the embolization of microparticles (embospheres of diameter  $300-500 \mu m$ ). Cerebral arteriography did not reveal any malformation of the external carotid supply. The right internal carotid showed atheromatosis and a small intra-cavernous aneurysm. As the epistaxis persisted, the patient was transfused and a general anaesthesia for surgical exploration and treatment was carried out. The right anterior ethmoidal artery was sectioned and a clip was placed on the right posterior ethmoidal artery, which stopped the bleeding. Post-operatively the patient presented left hemiplegia. Cerebral and facial magnetic resonance imaging showed inflammation of the right parotid gland with necrotic areas of the mastication muscles and the sinus mucosa on both sides and ischaemic lesions in the supply area of the right angular artery cerebral supply. Necrosis of the parotid and maxillary glands, the superior lip, the cheek, the nose and the soft palate along the right side developed progressively, associated with a right peripheral facial palsy. One month later, an area of cicatricial alopecia was noticed along the pathway of the right superficial temporal artery supply, a branch of the external carotid (Fig. 1). Cutaneous biopsy showed cicatricial fibrosis of the superficial dermis, deep dermal and hypodermal necrosis with follicular involvement. Deeper in the subcutis, fresh and old venous thrombosis were observed (Fig. 2).

### DISCUSSION

Therapeutic embolization is a valuable radiological and surgical technique for haemorrhagic problems. Its pre-operative efficiency for cerebral tumours such as meningiomas is well-



Fig. 1. Cicatricial alopecia in the right temporal region.

established (3-5). Emergency therapeutic arterial occlusion however requires many precautions, such as hyperselective catheterization, radiological survey and adapted particles. Main and major complications are cerebral stroke, blindness and cranial nerve palsies. Inadvertent occlusion of branches of the external carotid, other than those selected may produce minor complications such as cutaneous necrosis (1, 6). This is uncommon because of the rich blood supply to the scalp tissue with numerous collateral arteries (4, 5). In the case described here, the two main facial and cerebral arteries were involved. Radiologists and neurologists explained the left hemiplegia by a reflux in the right internal carotid during catheterization. The embolization of the right external carotid branches may have produced the occlusion of the cutaneous, muscular and osseous arterial branches. Progressive ischaemia led to the right facial palsy and scalp necrosis. Aggravating factors such as cerebral blood flow deficiency, poor blood supply or lack of collateral arteries may be present in an elderly woman. In the case described here the scalp necrosis appeared less acutely (1 month delay) than in other reported cases (3, 5).

Histopathological examination confirmed the ischaemic origin of this necrosis. Microscopic examination of the scalp skin confirmed the progressive and delayed process showing new and old ischaemic lesions, with secondary follicular necrosis leading to cicatricial alopecia. This case is exceptional, but since the use of specific techniques to stop bleeding have become more frequent, we believe that it is important for the dermatologist to be aware of such complications when examining a cicatricial alopecia, even years later.

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Fig. 2. Fresh thrombosis in the subcutaneous tissue. Van Gieson elastin stain  $\times 6.3$ .

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L. Toutous-Trellu, P. Chavaz and P. Piletta Department of Dermatology, University Hospital, rue Micheli Ducrest, CH-1211 Genève 4, Switzerland.

# Syringocystadenoma Papilliferum without an Antecedent Naevus Sebaceous

Sir

Syringocystadenoma papilliferum (SP), an uncommon sweat gland tumour, most often arises within a pre-existing naevus sebaceous, but also may sometimes appear by itself. We report here a case of SP not associated with nevus sebaceous, which clinically resembled a pyogenic granuloma.

### CASE REPORT

A 56-year-old man presented with a red tumour on his right cheek. The lesion had first appeared 10 years earlier. It had slowly enlarged over the ensuing years, and 3 years previously had begun to bleed readily after a slight injury. He was in excellent health and had no other skin lesions. An examination revealed a well-circumscribed, red-coloured, rounded, solitary  $6 \times 6$  mm tumour with a crust in the centre (Fig. 1). The lesion was excised. A histological examination disclosed papilliferous and ductal structures leading from the surface into the dermis. The epithelial lining consisted of a double-layered epithelium with an inner layer of tall columnar cells and an outer layer of small cuboidal cells. The stroma exhibited a plasma cell-rich infiltrate and a proliferation of



Fig. 1. Close up of syringocystadenoma papilliferum on the right cheek. Senile lentigines are visible around the lesion.

small blood vessels. Histopathological examination indicated a diagnosis of SP. There was no evidence of adjacent epidermal nevus.

### DISCUSSION

In most cases (40%), SP arises within a pre-existent nevus sebaceous present from childhood on the face or scalp, but it might arise as an isolated, acquired tumour without an antecedent nevus sebaceous (1). SP is not clinically distinct and a histological examination is usually required to make the diagnosis (1). The clinical features vary from an irregular, flat, grey or red area to a grey or dark brown, raised, cauliflower-like, verrucous, papillary, hyperkeratotic or sometimes moist, fleshy excrescence (2, 3). Those not associated with naevus sebaceous show hyperkeratotic or verrucous changes in the epidermal surfaces (4). Our patient was unique in that his tumour was similar to a pyogenic granuloma, probably due to the high proliferation of small blood vessels in the stroma of the tumour, and that it occurred late in life.

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Tetsuya Koga, Yumiko Kubota and Juichiro Nakayama Department of Dermatology, School of Medicine, Fukuoka University, 7-45-1 Nanakuma, Jonan-ku, J-814-0180 Fukuoka, Japan.