

An Unusual Skin Growth

A 65-year-old Chinese female presented with a long standing growth over her back that had been enlarging in size for the past 10 years, with contact bleeding noted over the past 1 year. The lesion had been present since childhood. There were no systemic complaints. On examination, a 3 x 3 cm, sessile, firm, pigmented, slightly ulcerated lump was noted over her mid back (Fig. 1). There were no palpable inguinal or axillary lymph nodes.



Fig. 1. A 3 x 3 cm, firm, pigmented, ulcerated growth over back.

What is the diagnosis?

- (A) Melanoma
- (B) Irritated Intradermal Melanocytic Nevus
- (C) Porocarcinoma
- (D) Squamous Cell Carcinoma
- (E) Basal Cell Carcinoma

Case Report

The entire lesion was excised with a 2-cm margin. Histological analysis revealed an ulcerated nodular mass with a biphasic population of tumour cells. The greater part of the tumour was composed of tongues of monomorphic ovoid cells with epidermal connection and displaying prominent ductal differentiation. In some areas, there was a clear transition of cytomorphology to tumour cells with cytological atypia displaying the presence of bizarre cells, in conjunction with areas of tumour necrosis (Figs. 2a and b). These findings were consistent with the diagnosis of a porocarcinoma arising from a pre-existing poroma.

Discussion

Poromas are benign glandular adnexal neoplasms, and can be of either eccrine or apocrine lineage. They belong to the spectrum of acrospiromas, along with dermal duct tumours, nodular hidradenomas, clear cell hidradenomas and hidroacanthoma simplex. Poromas typically present as skin-coloured or pigmented nodules and may have surface ulcerations. Dermatoscopic findings of poromas are not pathognomonic and include the presence of a white-

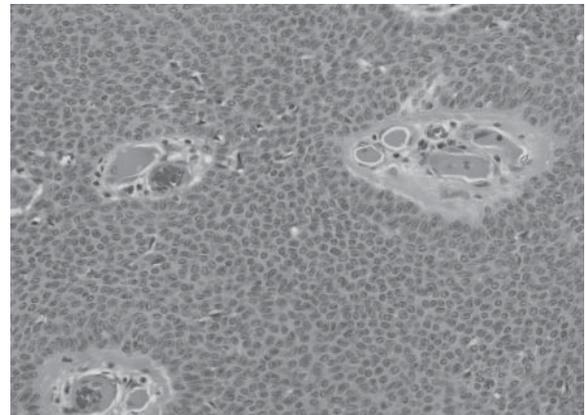


Fig. 2a. Poroma composed of cuboidal epithelial cells with monomorphic nuclei. (Haematoxylin and Eosin, x200).

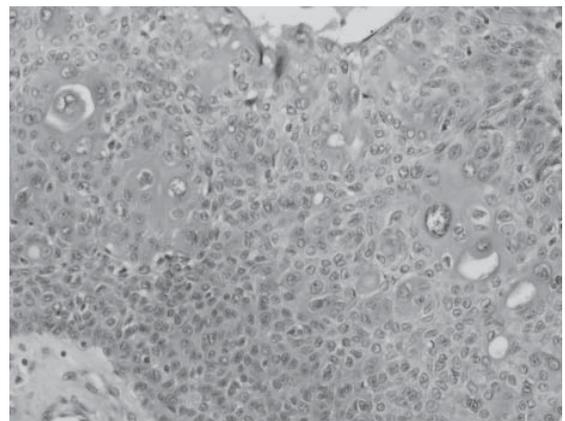


Fig. 2b. Transition to areas with cytological atypia and ductal differentiation. (Haematoxylin and Eosin, x200).

Answer: C

to-pink halo surrounding the vessels and combinations of glomerular vessels, pink-white structureless areas, linear irregular vessels and hairpin vessels.¹

Porocarcinoma is the malignant counterpart, and is rare, representing only 0.005% of epithelial cutaneous neoplasms. It tends to arise on the lower limbs (44%), trunk (24%), head and neck region (24%) and rarely affecting the penile region.² There is a long period of clinical history as it can arise from slow growing pre-existing poromas, as seen in our patient. Our patient was not immunosuppressed, which may have predisposed her to malignancy. Pre-existing poromas with a sudden accelerated growth phase and showing signs of induration, pain and bleeding would be suspicious for malignant changes. Dermatoscopic features of porocarcinoma would include a combination of atypical vascular pattern and presence of milky-red globules.¹ A delay in definitive treatment is usually attributed to the tumour's indolent behaviour or difficulty with clinical diagnosis. Metastases to lymph nodes can be seen in 20% of patients, and to distant sites in 10% of patients.³ Multinodularity, ulceration and rapid growth may be associated with local recurrences or metastasis.⁴ The clinical differentials for porocarcinoma would include melanoma, seborrheic keratosis, squamous cell carcinoma, basal cell carcinoma, verruca vulgaris and metastatic adenocarcinoma.

Wide excision of the primary tumour with margin clearance, leads to curative outcome in 70% to 80% of cases, with 20% chance of local recurrence.² Micrographic surgery can also be attempted to decrease morbidity and local recurrences. Porocarcinoma is rarely diagnosed preoperatively, and hence, surgical excision is usually not planned initially. However, in our patient, as our suspicion was that of a malignant lesion, we performed a wide excision with a 2-cm margin, and histology revealed margins clear of tumour cells. Long-term follow-up for recurrence is essential.

Conclusion

There are several important learning points in this case. We should be alert for malignant changes in long standing skin lesions. As a general guide, the ABCDE rule is useful for skin cancer screening. Asymmetry of lesion, poorly demarcated borders, appearance of various colours in the lesion or its periphery, increasing diameter and evolution of lesion in size, colour or appearance should warrant an in depth examination. In addition to the increasing size and asymmetry of our patient's lesion, she also experienced bleeding and ulcerative complications. Dermatoscopy can be useful in certain situations for differentiating benign from malignant lesions. When in doubt, physicians should refer patients with suspicious lesions to dermatologists for

further evaluation. All dubious lesions should be biopsied for definitive histological confirmation. Should patients decline biopsies, they should be educated on the ABCDE guide and advised to return should there be further deterioration of their skin lesions.

REFERENCES

1. Suzuki R, Shioda T, Konohana I, Ishizaki S, Sawada M, Tanaka M. Dermatoscopic features of eccrine porocarcinoma arising from hidroacanthoma simplex. *Dermatol Res Pract* 2010;2010:192371. Epub Oct 11 2010.
2. Shiohara J, Koga H, Uhara H, Takata M, Saida T. Eccrine porocarcinoma: clinical and pathological studies of 12 cases. *J Dermatol* 2007;34:516-22.
3. Lozano Orella JA, Valcayo Peñalba A, San Juan CC, Vives Nadal R, Castro Morrondo J, Tuñón Alvarez T. Eccrine porocarcinoma: Report of nine cases. *Dermatol Surg* 1997;23:925-8.
4. Robson A, Greene J, Ansari N, Kim B, Seed PT, McKee PH et al. Eccrine Porocarcinoma (Malignant Eccrine Poroma) A Clinicopathological Study of 69 cases. *Am J Surg Pathol* 2001;25:710-20.

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