

A rare case of Porocarcinoma at the lateral canthus as a mimic of basal cell carcinoma

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Introduction - Porocarcinoma

- Rare malignant tumour of the **eccrine sweat glands**
- Most commonly affects the upper and lower limbs, trunk, head and neck
- Eyelid involvement is **exceptionally rare**.
- Can arise *de novo* or from malignant transformation of a pre-existing benign lesion
- Clinically significant due to:
 - Risk of **local recurrence**
 - **Regional lymph node** involvement
 - Potential for **distant metastases** (lung and bone)

Case history

A woman in her 90s seen in the oculoplastic clinic following referral from the dermatology department.

Presentation:

- Slowly growing crusting lesion at the left lateral canthus (Present for 18 months).
- Telangiectasia noted at the base, suspicious of a basal cell carcinoma (BCC)

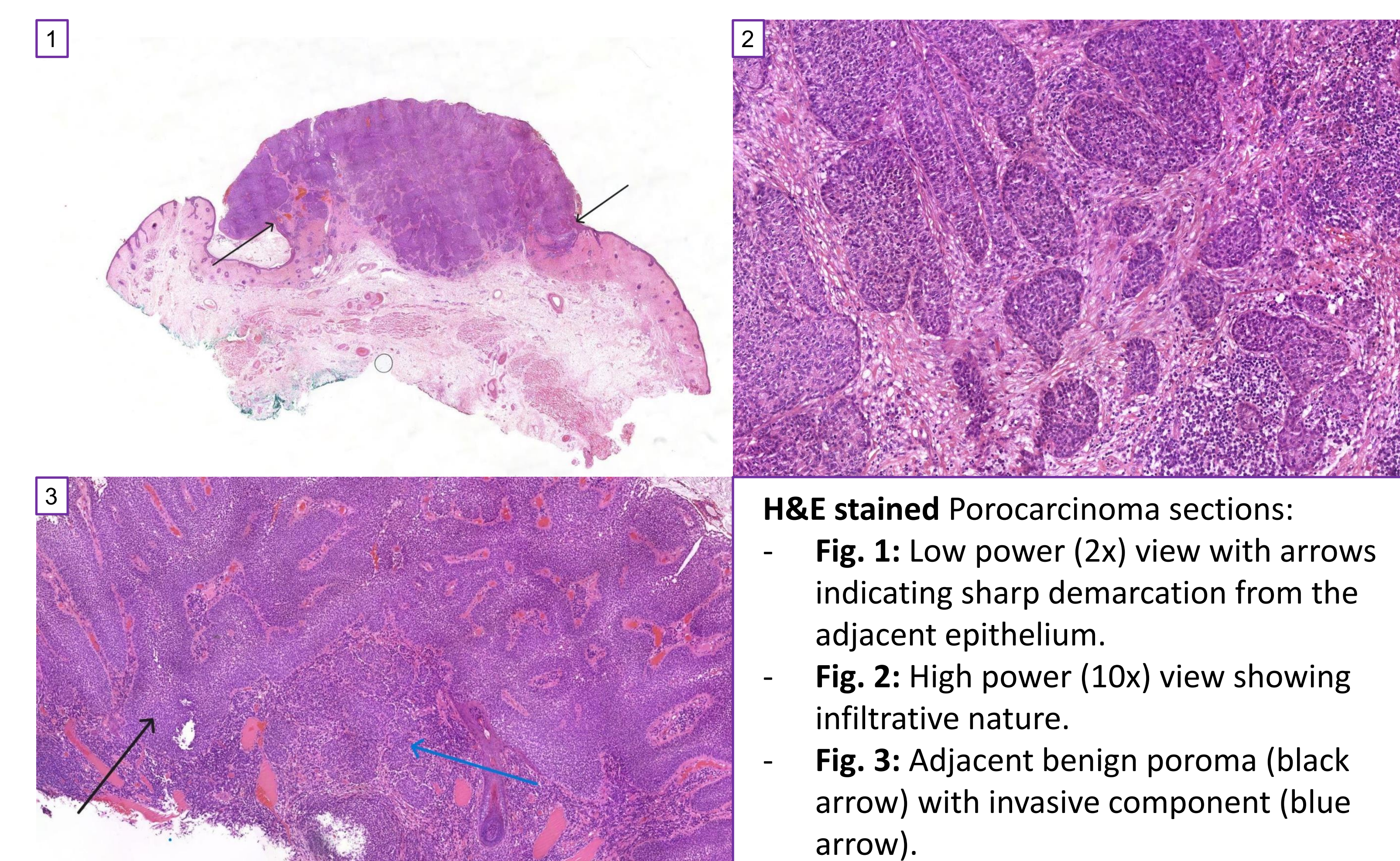
Histopathology (Excision biopsy):

- Focus of residual poroma, additional focus of squamous differentiation
- Strongly positive for **EMA** and **BerEP4**.
- Consistent with **malignant adnexal tumour**, favouring Porocarcinoma

Management and outcome:

- Complete excision with clear 2mm margin
- No recurrence at 8-week post-operative review

Histopathology



Discussion

Commonly misdiagnosed as

- Poroma
- Basal cell carcinoma
- Squamous cell carcinoma
- Sebaceous carcinoma

Poor prognostic features

- Large tumour size
- Ulceration
- Rapid tumour growth
- Head and neck location

Preferred method of treatment:

- Wide local excision or mohs micrographic surgery to ensure clear margins
- Chemotherapy if evidence of multiple lymph nodes or distant metastases

Histopathology

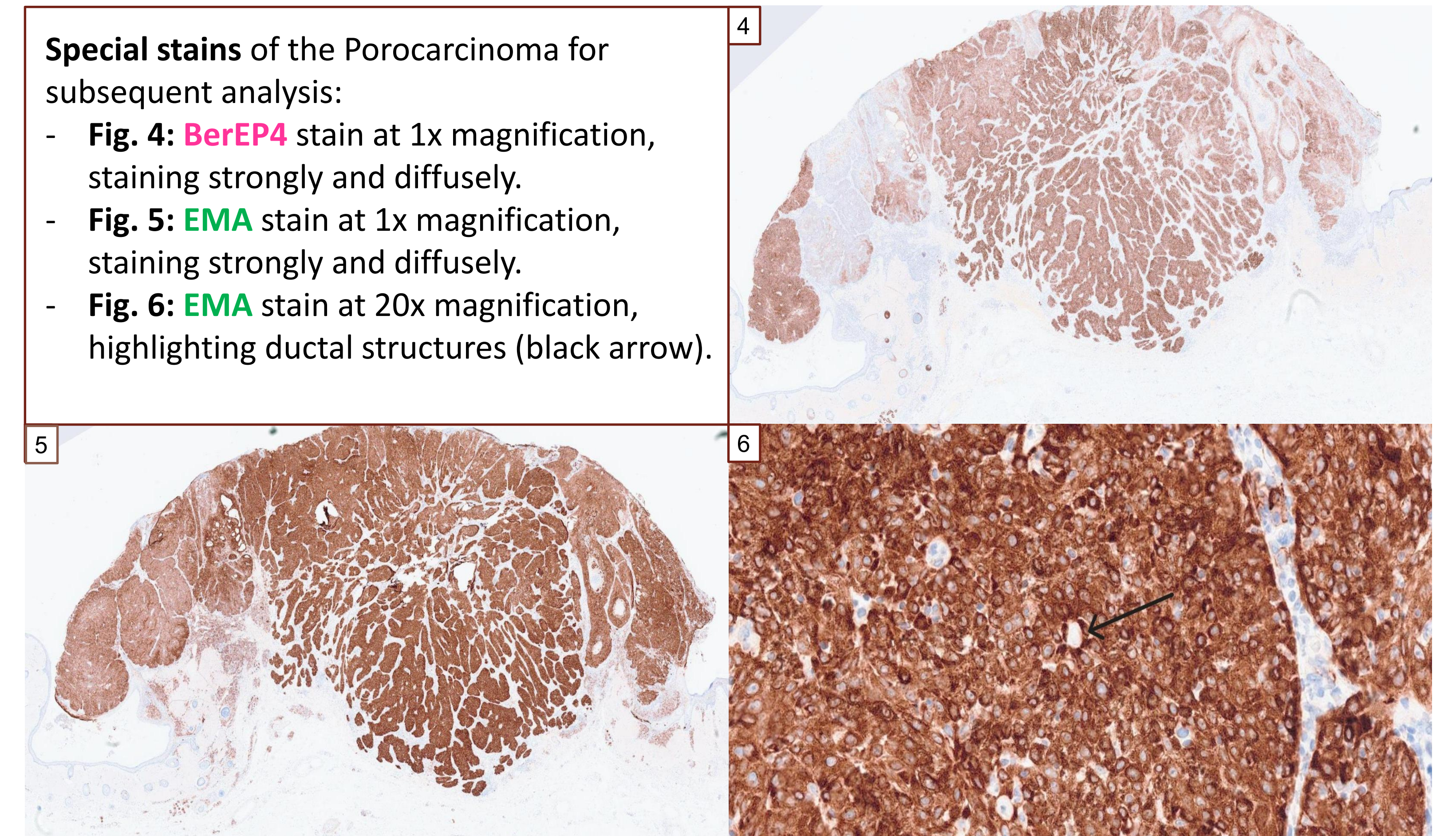
- EMA and CEA show ductal luminal borders
- CD117, CK19 and BerEP4 indicate Porocarcinoma over SCC

Regular follow-up encouraged due to recurrence risk

Staining

Special stains of the Porocarcinoma for subsequent analysis:

- **Fig. 4:** **BerEP4** stain at 1x magnification, staining strongly and diffusely.
- **Fig. 5:** **EMA** stain at 1x magnification, staining strongly and diffusely.
- **Fig. 6:** **EMA** stain at 20x magnification, highlighting ductal structures (black arrow).



Conclusion

- Early identification and histopathology diagnosis is paramount and will help prevent recurrence
- BerEP4 along with strong EMA staining and ductal differentiation strongly suggests Porocarcinoma over basal cell carcinoma (over strong BerEP4 alone)
- Regular monitoring of scar site and local lymph nodes help early recognition of recurrence/metastases

References

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2. Goto, K., Ishikawa, M., Hamada, K., Muramatsu, K., Naka, M., Honma, K., & Sugino, T. (2021). Comparison of Immunohistochemical Expression of Cytokeratin 19, c-KIT, BerEP4, GATA3, and NUTM1 Between Porocarcinoma and Squamous Cell Carcinoma. *The American Journal of dermatopathology*, 43(11), 781–787. <https://doi.org/10.1097/DAD.0000000000001901>