

Diagnostic challenge of gigantic benign skin lesion

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A giant benign epidermal proliferative lesion is a rare finding. These skin growths may mislead clinicians and pathologists mostly due to their size, as well as unusual localization, morphology, or even coexisting pathology. The size of these skin growths usually varies from few millimeters up to a few centimeters, but in this case it were up to almost ten centimeter.

We report a benign case of verrucous hyperplasia, which is unique regarding to its dimension and also seldom published in the literature.

Aims and Objectives

This case raised questions about the origin of this lesion. We describe the importance of thoroughness pathologist's work and diagnostic challenge which appears with gigantic skin tumours.

Verrucous hyperplasia is a benign condition, but could transform into verrucous carcinoma, therefore it is crucial for the pathologist to compose specific histological features to the places where they belong.

Materials and Methods

- Man in his mid-50s referred to his family doctor with a complaint of a painful gigantic skin keratoma [Fig. 1] in a right lower limb amputee.
- One year after the second amputation surgery, patient noticed swelling and colour changes in area of a stump.
- He was directed to dermatologist with a clinical suspicion for allergic or contact dermatitis.
- On physical examination, a well-circumscribed 10x7 centimetre in diameter, keratotic oval tumor [Fig. 2] was seen in a right limb stump area.

- Several different doctors was afraid of performing a surgery in this risky circumstances.
- Few months until the final surgery, patient was suffering in a huge pain and almost could not walk with a prosthesis.

Results

After surgical skin growth excision, patient's material was forward to the pathology department. Histopathology examination [Figure 3] revealed a prominent lesion with a hyperplastic acanthotic stratified squamous epithelium with exophytic papillary projections and underlying fibrovascular connective tissue. Epithelial cells shows no signs of dysplastic features or invasion. The final diagnosis of verrucous hyperplasia was made.

At this moment, more than one year after the surgical treatment, there was no recurrence at the stump area. Patient is living his life properly, he is using a new and more comfortable leg prosthesis without any difficulties.

Conclusions

- Verrucous hyperplasia is a benign condition characterized as hyperplastic stratified squamous epithelium, in the form of exophytic papillary projections with broad and superficial downgrowths of the epidermis, and with no evidence of invasion or significant cell atypia.
- Verrucous hyperplasia could transform into verrucous carcinoma, therefore it should be treated as carcinoma due to their overlapping features.
- Possible pitfall: due to gigantic skin lesion, uncommon localization, and lack of specific dermatopathology knowledge, it could be misdiagnosed as a malignant tumor, therefore a thoroughness pathologist's work is essential to make a precise diagnosis.



Figure 1: Gigantic skin keratoma in a right lower limb amputee (patient picture before the surgery).

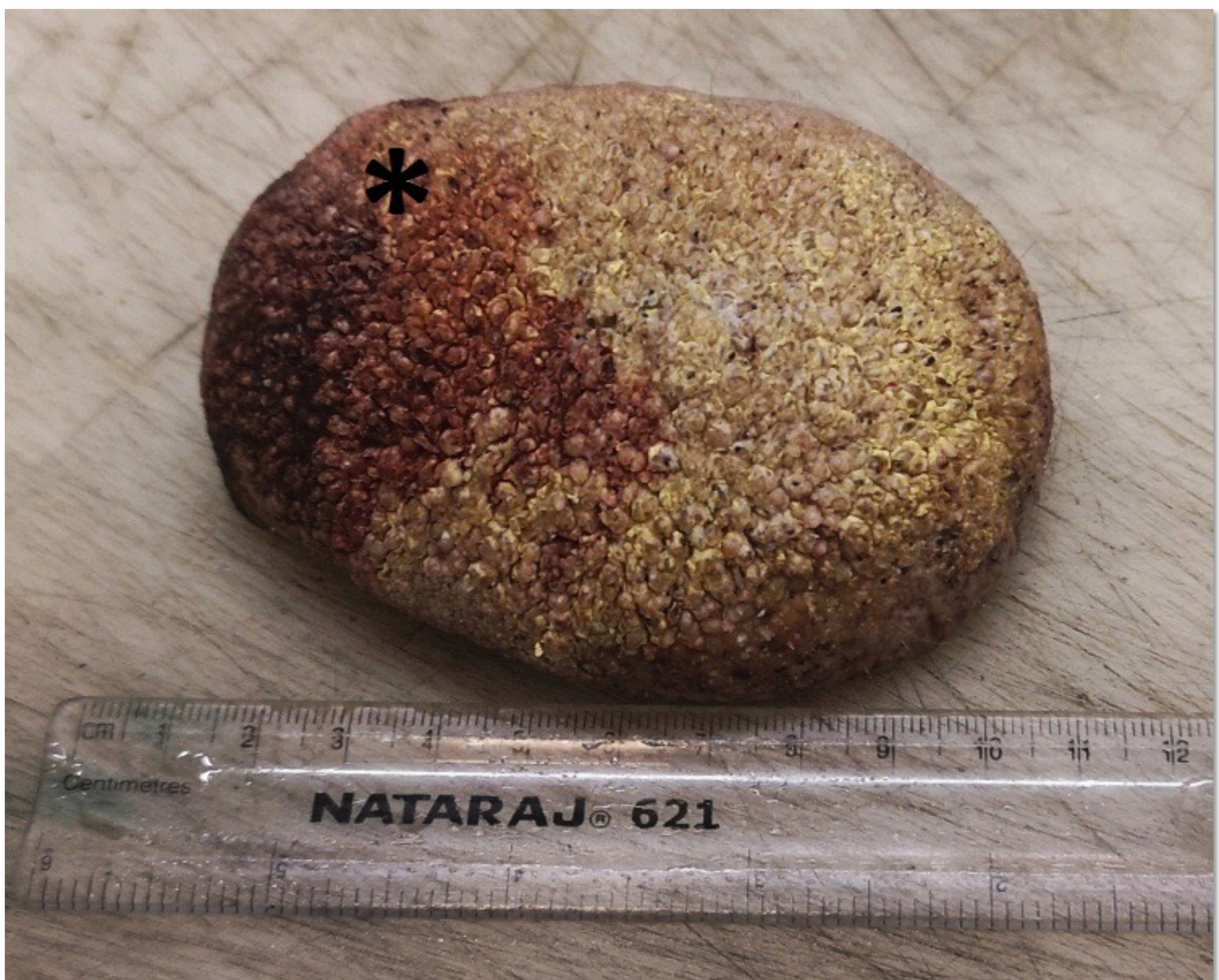


Figure 2: Gross description: finely rugged, yellow-whitish, verrucous and exophytic gigantic skin lesion. Left side of this tumour stained with iodine before the surgery (asterisk).

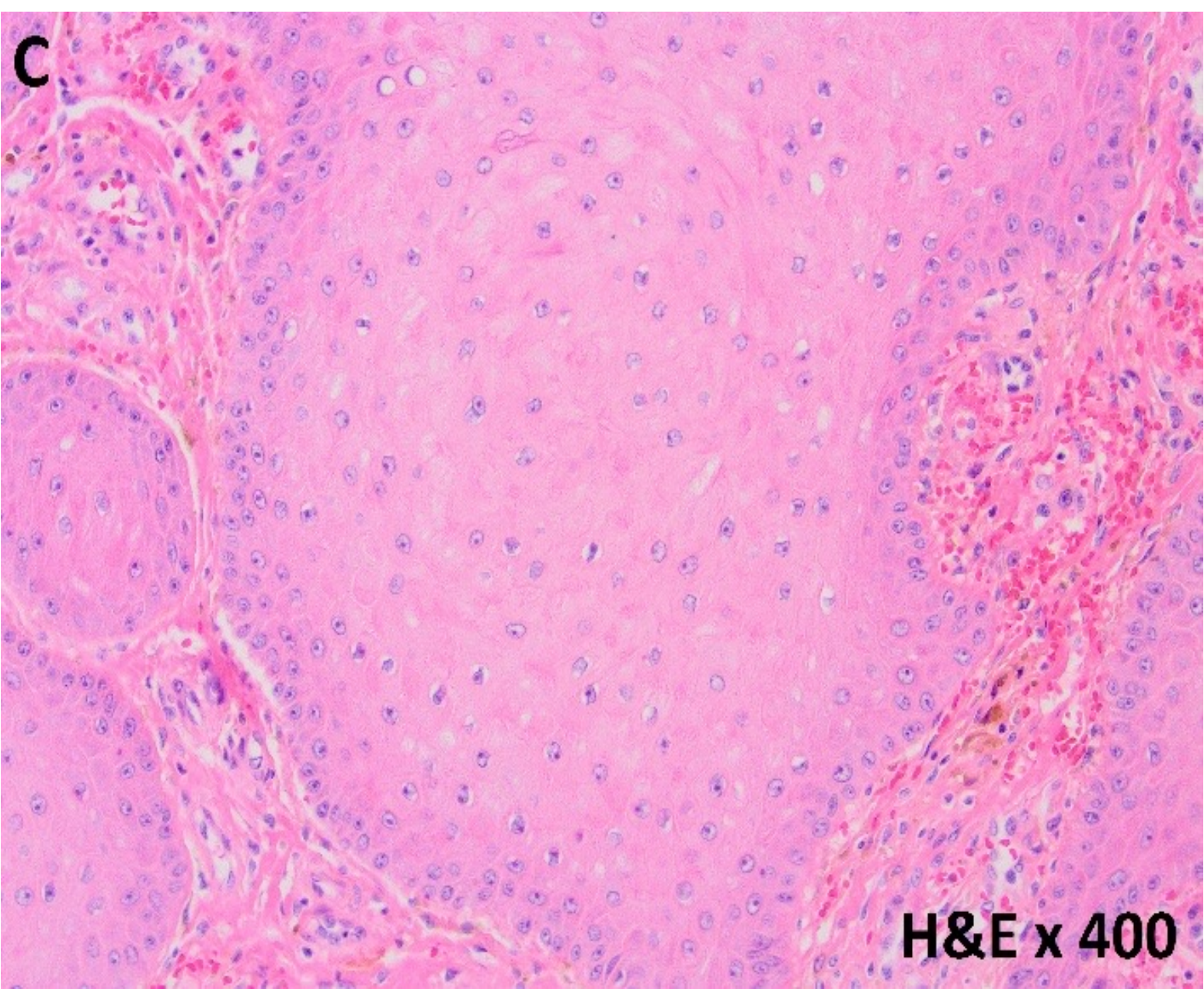
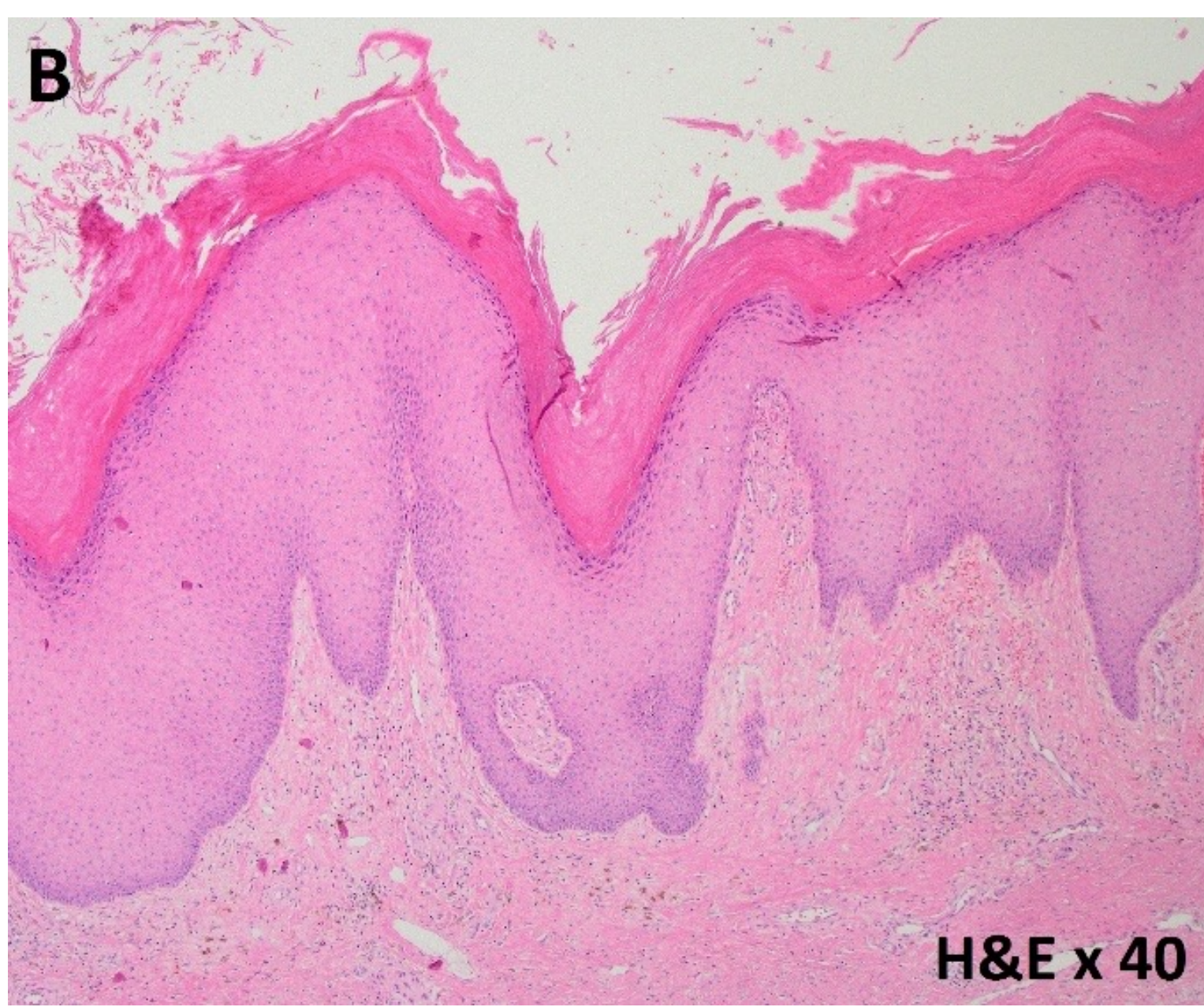
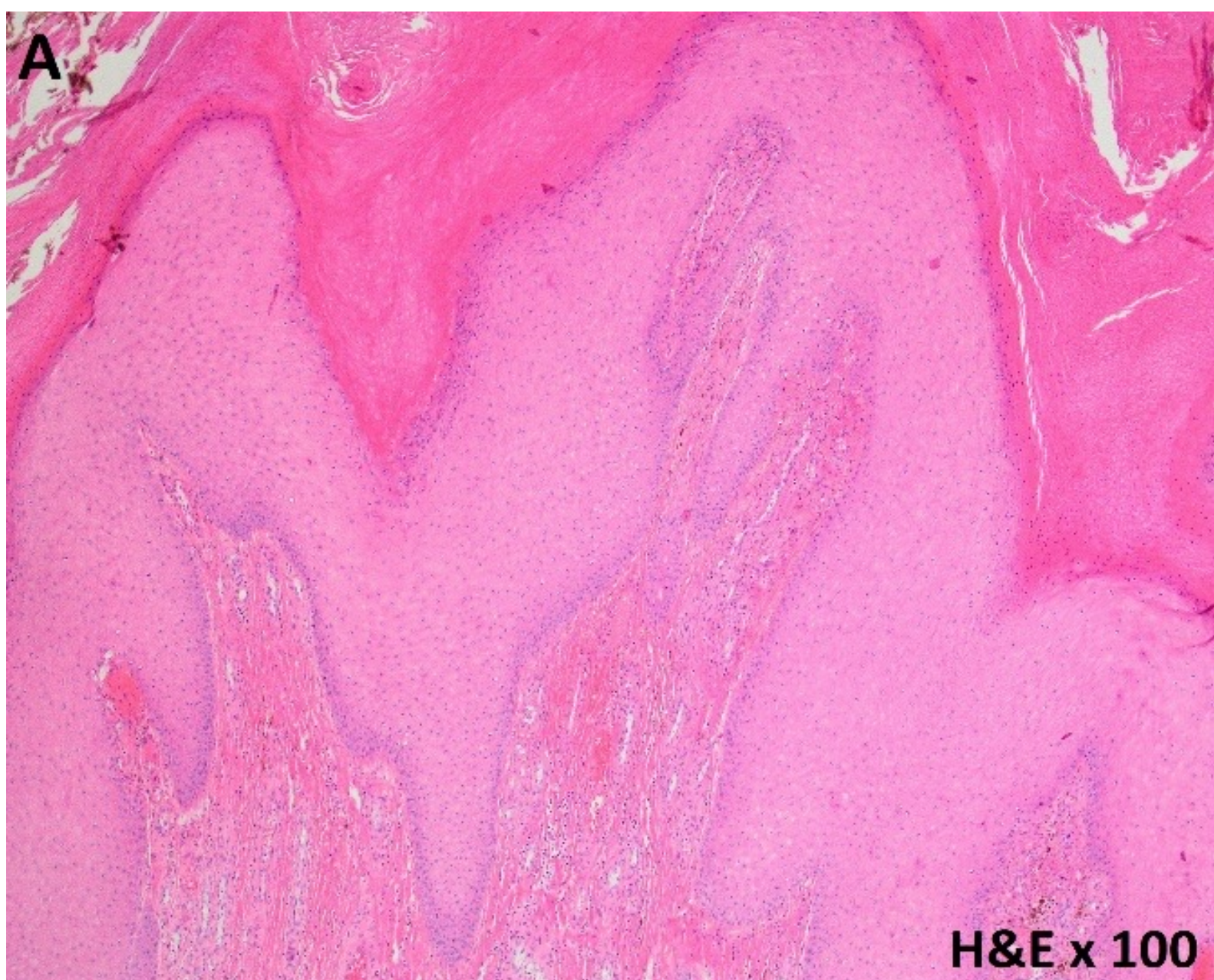


Figure 3: Surgical specimen: photomicrographs showing hyperplastic stratified squamous epithelium, in the form of exophytic papillary projections with broad downgrowths of the epidermis, keratin pluggin in the clefts, with no evidence of invasion (A, B), as well as, no dysplastic cell features or mitotic activity (C). The underlying fibrous tissue indicates middling chronic inflammation, small vessels dilatation and hyperemia together with single melanophages (A-C).

References

1. Sonal Grover, Mihir Jha, Bhushan Sharma *et al.* Verrucous Hyperplasia: Case report and differential diagnosis; *Sultan Qaboos Univ Med J*; 2017; 17(1):e98-e102.
2. Ji Hea Chang, Hee Bong Moon, Chang Jae Kim *et al.* Intractable Verrucous Hyperplasia: A Surgically Corrected Case; *PM&R*; 2015; 7(3):322-325.
3. Vinay K Hazarey, Sindhu M Ganvir, Ashish S Bodhade. Verrucous hyperplasia: A clinico-pathological study; *J Oral Maxillofac Pathol*; 2011; 15(2); 187-191.
4. Yi-Ping Wang, Hsin-Ming Chen, Ru-Cheng Kuo *et al.* Oral verrucous hyperplasia: Histologic classification, prognosis, and clinical implications; *J Oral Pathol Med* 2009; 38:651-6.
5. Hej Meulenbelt, JBH Geertzen, PU Dijkstra, MF Jonkman. Skin problems in lower limb amputees: an overview by case reports; *JEADV*; 2007; 21(2):147-155.