







Squamous Cell Carcinoma in a Neglected Case of Acrosyndactyly

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Squamous cell carcinoma (SCC) in a neglected acrosyndactyly is not reported in the literature. Acrosyndactyly is a rare form of congenital anomalies of the hand with fusion of the distal digits and the proximal digits that are not fused have a fenestration, which is a characteristic of constriction ring syndrome. The most common skin malignancy of the hand is SCC.¹

A 62-year-old man presented to the outpatient clinic with a 1-year history of an ulcerated lesion at the right hand at the tips of the digits that progressed rapidly and was painful. He gives a history of repeated ulceration and healing. It was treated with topical antibiotics and dressings. Examination of the right hand showed a normal and functional thumb along with a cluster of fingers that are reduced in span in comparison to the other hand with an ulcerated lesion of size 3 × 2 cm on the tips of syndactyly digits extending from the tips and on to the volar and dorsal aspects of the tips with surrounding induration and tenderness upon touch (► **Fig. 1**). A sinus is noted in between the index and middle finger proximal phalanges. There are no palpable lymph nodes in the ipsilateral axilla. X-ray of the hand suggested absent middle and distal phalanges in all fingers and involvement of the bone with the tumor. A sinus in between the index and middle finger proximal phalanges was observed (► **Fig. 2**). An edge biopsy showed well-differentiated SCC. The patient underwent amputation at the level of metacarpophalangeal joint. The histopathological examination (HPE) is suggestive of well-differentiated SCC and the margins were free of tumor. The presence of a sinus in between the index and middle finger proximal phalanges and the complete absence of the middle and distal phalanges on the X-ray pointed toward acrosyndactyly.

There is no proof in the literature that uncorrected acrosyndactyly is a risk factor for development of SCC. The etiology is not clear but chronic inflammation is one of the main reasons. A chronic damage to the skin may cause SCC.²

Lam et al³ reported a case of SCC in partial syndactyly and opined that the development of carcinoma in their case was due to repeated friction leading to chronic inflammation. As we could not identify any other possible risk factors, it is assumed that a similar mechanism is responsible for the development of SCC.

This case supports the idea that acrosyndactyly should be operated on early in life to prevent complications.

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Conflict of Interest

None declared.

References

- 1 Askari M, Kakar S, Moran SL. Squamous cell carcinoma of the hand: a 20-year review. *J Hand Surg Am* 2013;38(11):2124–2133
- 2 Motley R, Kersey P, Lawrence C British Association of Dermatologists British Association of Plastic Surgeons Royal College of Radiologists, Faculty of Clinical Oncology. Multiprofessional guidelines for the management of the patient with primary cutaneous squamous cell carcinoma. *Br J Dermatol* 2002;146(01):18–25
- 3 Lam WL, Hardwicke J, Laitung G. Squamous cell carcinoma in bilateral untreated syndactyly. *Scand J Plast Reconstr Surg Hand Surg* 2009;43(05):294–295

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Fig. 1 Picture of a patient's right hand showing nonhealing ulcer on the tips of the fingers and normally developed thumb. (A) Volar aspect. (B) Dorsal aspect.



Fig. 2 X-ray of the hand showing complete absence of the middle and distal phalanges of the middle and ring fingers and only the base of the middle phalanges in the index and ring fingers. A sinus is visible between the proximal phalanges of the index and middle fingers.