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**Case Report**

# Sebaceous carcinoma of the hand: an extremely rare case

**Anak Agung Gede Putra Prameswara*, Mirza Ariandi, Henry Yurianto, Ruksal Saleh**

Department of Orthopedic and Traumatology, Hasanuddin University, Makassar, Indonesia

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***Correspondence:**
Dr. Anak Agung Gede Putra Prameswara,
E-mail: d_dive_right_in@yahoo.co.id



## ABSTRACT

Sebaceous carcinoma is an aggressive tumor derived from adnexal epithelium of sebaceous gland and accounts for 1% of all cutaneous malignancy. Most commonly found at head and neck region. with sebaceous carcinoma in extrimity few than 100 cases have been formally documented. Since this lesion are uncommon, this lession tend to be misdiagnosed. Sebaceous carcinoma is a clinically innocuous appearing lesion with no pathognomonic features. Diagnosis is seldom made before operation and frequently misdiagnosed after operation We present our experienced with sebaceous carcinoma. female 45 years old, with history mass at her left hand grew rapidly during the past 4 months. At the beginning, there was a small wart over the little finger of her left hand that was not changing for the past 30 years. The patient then started scratching the wart until it fell off (1 year ago). The wound initially healed but then the same lesion grew back and became even larger. The patient repeated this habit and the lesion grew into its current size. The lesion itself started to bleed easily and became infected. During the past 4 months, patient also experienced the same lesion growing at her left index finger. Patient also complaint of pain which was localized to the lesion, non-radiating, and was felt increased when the patient scratched at the lesion. We performed resection of tumor and amputation at 4$^{th}$ and 5$^{th}$ fingers and also disarticulation at MCP joint 2$^{nd}$ finger and take a sample as histhopatological examination.

**Keywords:** Amputation, Resection tumor, Sebaceous carcinoma, Uncommon

## INTRODUCTION

Sebaceous carcinoma is a very rare case and potentially aggressive skin cancer that derived from or mimicking the sebaceous glands.[1] Fewer than 100 cases have been formally documented (excluding of ocular adnexa).[2-8] Sebaceous carcinoma is originate from wherever sebaceous glands are found in the body, most of the cases develop in the periocular region (75%). It represents approximately 3.2% of all eyelid malignancies and 0.8% of all eyelid tumors.[2] The consensus, however, does appear to be that squamous cell carcinoma ranks as the second most frequent eyelid malignancy. Malignant melanoma and sebaceous carcinoma represent the third and fourth most common eyelid malignancies, respectively.[9-10]

Extraocular case of sebaceous carcinoma has been reported approximately 25% of all cases. The highest incidence is in the head and neck region, it is because there is pretty much sebaceous glands on that region.[11-13] The other reported sites in order of frequency is include the external genitalia, the parotid and submandibular glands, the external auditory canal, the trunk and upper extremity, the dorsum of the great toe, and laryngeal/pharyngeal cavities. Sebaceous carcinoma of the hand has been reported in 15 patients and one is on the distal index finger has been described. The parotid

gland is a frequent site of origin and the tumor may arise from pluripotential cells.[14]

Several authors associate extraocular sebaceous carcinoma with a far better prognosis than ocular sebaceous carcinoma sebaceous carcinoma, regardless of location, is aggressive and has a tendency to recur locally after surgical excision.[14] Since this lesion are uncommon, this lession tend to be misdiagnosed. Sebaceous carcinoma is a clinically innocuous appearing lesion with no pathognomonic features. Diagnosis is seldom made before operation and frequently misdiagnosed after operation.[14]

## CASE REPORT

Reporting female 45 years old, with history mass at her left hand grew rapidly during the past 4 months. At the beginning, there was a small wart over the little finger of her left hand that was not changing for the past 30 years. The patient then started scratching the wart until it fell off (1 year ago). The wound initially healed but then the same lesion grew back and became even larger. The patient repeated this habit and the lesion grew into its current size. The lesion itself started to bleed easily and became infected. During the past 4 months, patient experienced the same lesion growing at her left index finger. Patient also complaint of pain which was localized to the lesion, non-radiating, and was felt increased when the patient scratched at the lesion. No history of antecedent trauma, infection, or surgery in the area was noted. His medical, surgical histories and family history were unremarkable.

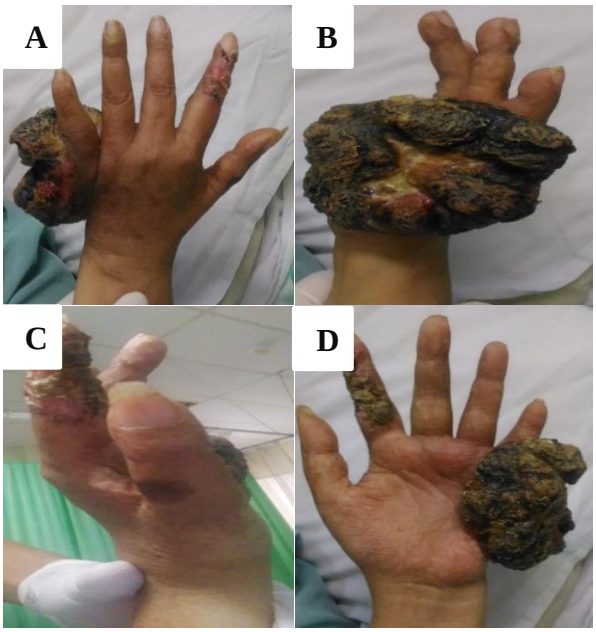


**Figure 1: Clinical picture mass on the left hand. A) From the anterior side. B) From the lateral side, C) From the medial side, D) From the anterior side.**

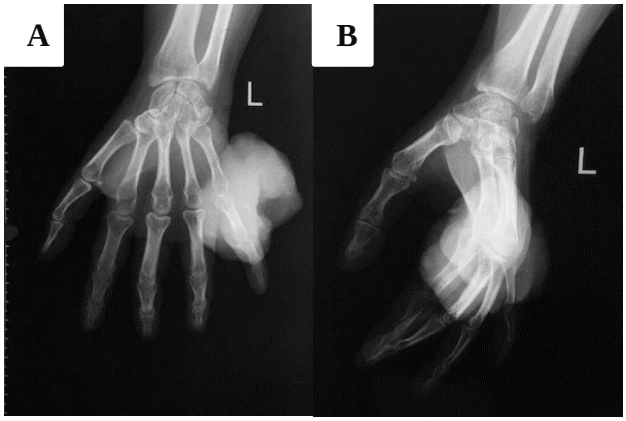


**Figure 2: Radiological examination of the left hand. A) Anterior posterior view, B) Oblique view.**

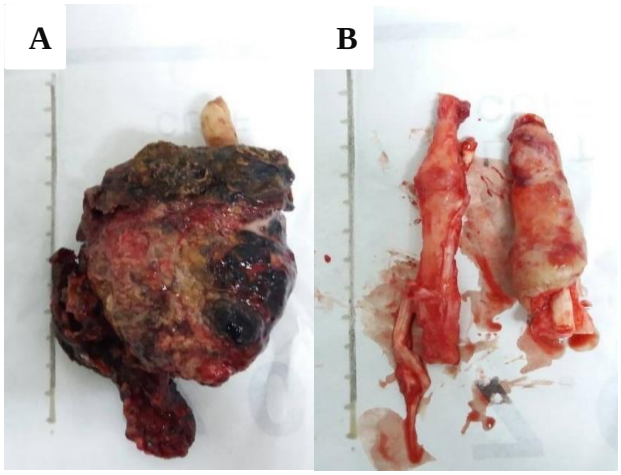


**Figure 3: Mass on the left hand. A) the mass. B) the amputee bone.**

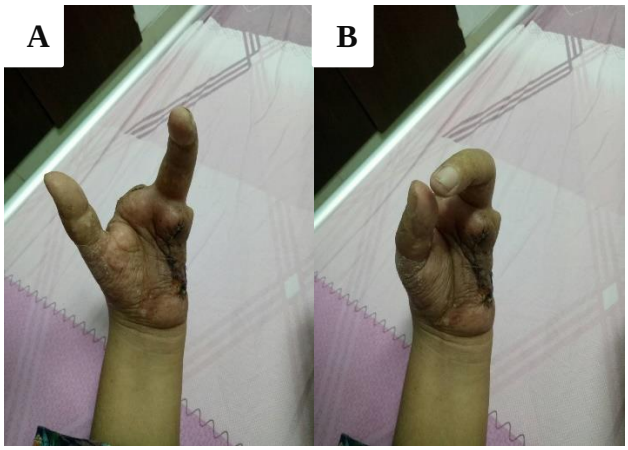


**Figure 4: Clinical picture after 1 year of surgery. A) Extension fingers, B) Flexion fingers.**

There was a mass over the ulnar aspect of her left hand and left index finger with hard irregular surface (mixture of keratotic surface, granulation tissue and infected wound), clear border. The mass is immobile and easily bleeds, there is tenderness. There was also a keratotic

lesion. There is no enlargement of the lymph nodes. From radiological examination of the left hand, there is density of the soft tissue at the ulnar side of the hand, with impression of soft tissue tumor of the hand.

We performed resection of tumor and amputation at 4th and 5th fingers and also disarticulation at MCP joint 2nd finger and take a sample as histhopatological examination.

The histhopatological result show tumor nest, derived from sebacea gland (microscopic examination 40 x magnifying, with Hematoxylin and eosin stain). After 1 year of surgery there was no sign of recurrence of this tumor. Patient feel no pain anymore. the patient has no evidence of recurrence or metastasis.

## DISCUSSION

Sebaceous carcinoma is a rare and potentially aggressive skin cancer arising from sebaceous glands. Although it may originate wherever sebaceous glands or glands of Zeis are found in the body, about 75% of cases develop in the periocular region. Brownstein and Shapiro found only one case in 78,294 skin biopsies. In 4,000 cutaneous carcinomas It represents approximately 3.2% of all eyelid malignancies and 0.8% of all eyelid tumors.[1] It shows a high tendency towards metastasis and local recurrence.

It is more common in the seventh and eighth decades of life, but it may occur at any age.[16] It is extremely rare in children with approximately ten cases having been reported in the literature.[1]

Extraocular case of sebaceous carcinoma has been reported approximately 25% of all cases. The highest incidence is in the head and neck region, it is because there is pretty much sebaceous glands on that region.[11-13] The other reported sites in order of frequency is include the external genitalia, the parotid and submandibular glands, the external auditory canal, the trunk and upper extremity, the dorsum of the great toe, and laryngeal/pharyngeal cavities. Sebaceous carcinoma of the hand has been reported in 15 patients and one is on the distal index finger has been described. The parotid gland is a frequent site of origin and the tumor may arise from pluripotential cells.[14]

Clinically, the tumor can vary in size from 6 mm can grow as large as 20 cm. The sex distribution of extraocular sebaceous carcinoma appears to be about equal for male and female patients and the mean age of occurrence is 63 years. The clinical appearance of extraocular sebaceous carcinoma is not pathognomonic, the lesion may be a pink to red-yellow nodule bleeding and discharge has been reported in approximately one third of the cases.[14] Diagnosis is seldom made before operation and frequently misdiagnosed after operation. The color and/or discharge may be the result of sebaceous secretion. The lesions are usually present for at least 6 months and may enlarge rapidly. Sebaceous gland carcinoma has been associated with sebaceous adenomas radiation exposure.[3,17,18] These tumors may grossly mimic basal cell carcinoma, squamous cell carcinoma, or cutaneous horn

The pathogenesis of sebaceous carcinoma is still unclear. Ansai and Mihara at 2000, reported two cases of sebaceous carcinoma in close association with actinic keratosis. They conclude that the combination of sebaceous carcinoma and actinic keratosis may either be coincidental or suggest that actinic keratoses may differentiate towards skin adnexae including sebaceous glands.[19]

Ray amputation is not the only form of treatment for sebaceous gland carcinoma. Wide local excision is an alternative treatment of choice.[13] Local recurrence is not uncommon. These carcinomas have been known to spread to adjacent tissues and through the lymph system. The pathologic nature of the tumor must be considered. A more aggressive tumor may require a more extensive resection.[13]

Whereas sebaceous carcinoma of the hand is quite rare and only several cases have been described. Sebaceous carcinoma has an aggressive potential, with up to 14% to 25% locoregional and distant spread reported.[11] Standard surgical resection with wide margins (10mm) is a common treatment for sebaceous carcinoma, whereas special care needs to be taken for resections of eyelid tumors.[11] Radiation therapy has been used in 10 of 30 patients, in order of curative intent.[15] Local control of disease after radiation and/or surgery was 90% after 2 to 10 years.[15]

## CONCLUSION

Sebaceous carcinoma is an aggressive tumor derived from adnexal epithelium of sebaceous gland. This lesion is uncommon and no pathognomonic features, it tends to be misdiagnosed. In our case resection of tumor was performed. there was no sign of recurrence of tumor and no pain anymore.

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