Scientific Research Publishing

Open Journal of Modern Neurosurgery, 2025, 15(3), 218-223
https://www.scirp.org/journal/ojmn
ISSN Online: 2163-0585
ISSN Print: 2163-0569

Right Inguinal Neuralgia in a Patient Wrongly Operated for a Strangulated Inguinal Hernia Revealing a Microcystic Adnexial Carcinoma

Kouassi Jean Marie Maurin Kisito Quenum[1*], Youssouf Sogoba[2], Armel Hadonou[3], Faouziath Bobo[3], Marius Monsia[3], Djamiou Bio Salifou[3], Amidou Adjamou[1], Holden Olatundji Fatigba[1]

[1]Service de Neurochirurgie, du Centre Hospitalier Universitaire et Départemental (CHUD-BA), Parakou, Bénin
[2]Service de Neurochirurgie, CHU Gabriel Touré, Bamako, Mali
[3]Service de Chirurgie, du Centre Hospitalier Universitaire Departmental, Parakou, Bénin
Email: *kisitoq@gmail.com

How to cite this paper: Quenum, K.J.M.M.K., Sogoba, Y., Hadonou, A., Bobo, F., Monsia, M., Bio Salifou, D., Adjamou, A. and Fatigba, H.O. (2025) Right Inguinal Neuralgia in a Patient Wrongly Operated for a Strangulated Inguinal Hernia Revealing a Microcystic Adnexial Carcinoma. *Open Journal of Modern Neurosurgery*, **15**, 218-223.
https://doi.org/10.4236/ojmn.2025.153023

Received: June 26, 2025
Accepted: July 26, 2025
Published: July 29, 2025

Abstract

Post-operative inguinal neuralgia is an exceptional pathology despite the high frequency of surgery in this anatomical region. We report the case of a 62-year-old patient, initially managed for a painful right inguinal tumefaction mistakenly taken for a strangulated inguinal hernia. After hernia repair, the swelling recurred 2 months later, accompanied by intense neuralgic pain. The diagnosis of ilioinguinal nerve ligation was evoked or fibrosis of the surgical scar as a differential diagnosis, followed by corticosteroid infiltration with no pain improvement. The persistence of symptoms required an abdominal and pelvic CT scan, and the patient underwent further surgery, which revealed a tumour. Histology of the resected mass revealed a microcystic adnexal carcinoma. This case illustrates the diagnostic challenges of atypical inguinal swellings.

Keywords

Microcystic Adnexial Carcinoma, Inguinal Swelling, Inguinal Hernia

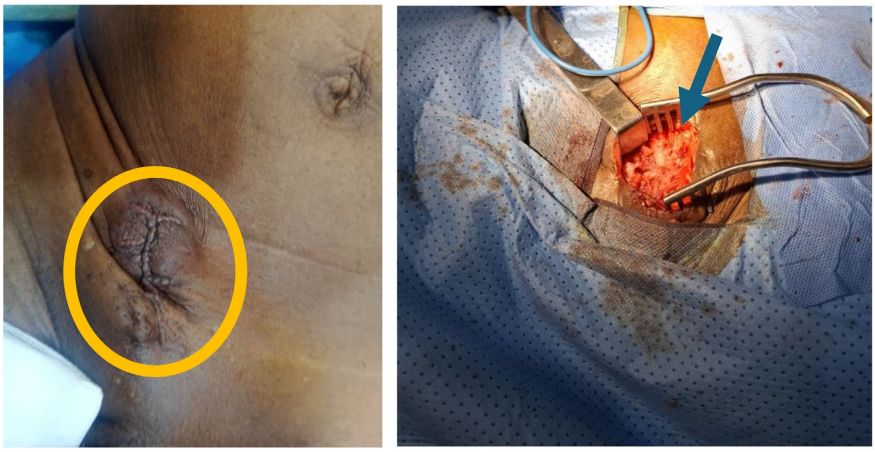
1. Introduction

Painful inguinal swellings are a frequent clinical presentation in general surgery, often associated with conditions such as inguinal hernias [1]. Analysis of the pulsatile characteristics of the pre-existing swelling prior to the onset of atypical pain, or the recurrence of such swellings after surgery, should alert patients to the possi-

bility of rare diagnoses, such as adnexal tumors derived from the sweat glands in the form of adnexal microcystic carcinoma [2] [3]. These are rare cutaneous malignant tumours, representing approximately 1% of cutaneous tumours, with metastatic potential, which are managed medico-surgically with a poor prognosis [3]-[5].

2. Observation

A 62-year-old man consulted for a painful right inguinal swelling. The history revealed an identical swelling that had appeared a few months previously and had been followed up in another hospital where he had undergone a hernia repair 2 months previously for a so-called strangulated right inguinal hernia. Immediately postoperatively, he reported a progressive increase in the intensity of inguinal pain, first paresthesia-like, then burning or electric discharge-like, becoming very intense and assessed at 8/10 on the visual numerical scale. Clinical examination on admission revealed a painful right inguinal mass, oval with a long axis of 5 cm and a short axis of 3 cm, hard and non-mobile in relation to the deep plane. The skin was thickened and wrinkled, with keloids from the old surgical scar (**Figure 1**).



(A) (B)

Figure 1. (A) Right inguinal swelling with a retractile operative scar; (B) Intraoperative image after placement of the auto-static retractor, showing cartilaginous fibrous tissue in the background.

The diagnosis of fibrosis of the surgical scar or ligation of the right ilioinguinal nerve was suggested as a differential diagnosis for iatrogenic injury of nerve.

Corticosteroid infiltration was performed as a first-line treatment, resulting in temporary pain relief. One week after the infiltration, the pain returned and the swelling persisted, requiring further investigation.

Ultrasound revealed a tissue formation opposite the scar from the right hernia repair, infiltrating the muscle plane, with an ill-defined relationship with the right femoral vessels. Abdominal and pelvic CT scan followed by angioscan revealed a right inguinal tissue mass infiltrating the rectus abdominis and internal transverse

muscles, enveloping the homolateral spermatic cord, without vascular invasion of the right femoral vessels (Figure 2).

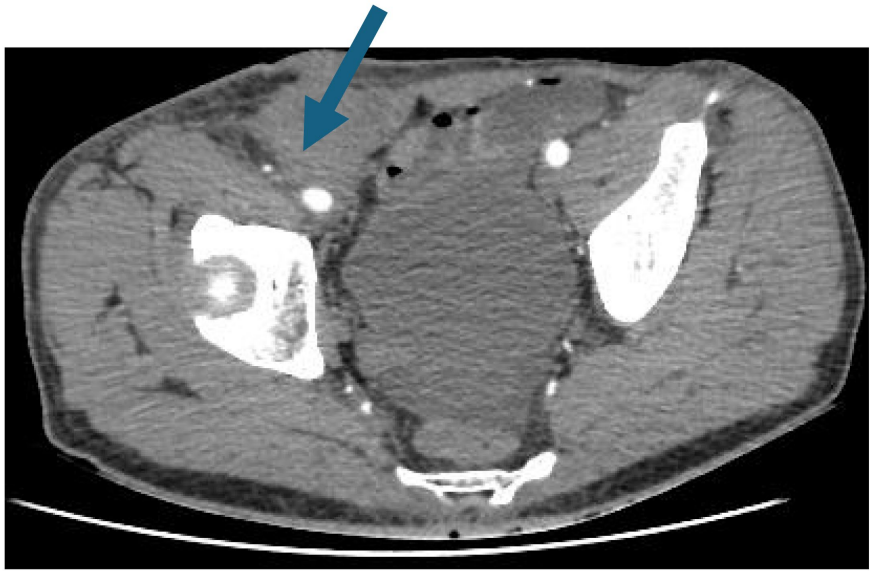


Figure 2. Right inguinal tissue mass infiltrating the rectus abdominis and internal transverse muscles and enveloping the homolateral spermatic cord without vascular invasion.

The patient underwent reoperation with wide excision of the inguinal mass (Figure 1(B)). The surgical specimen was sent for anatomopathology examination. Histological analysis showed a histological appearance of a microcystic adnexal carcinoma (Figure 3).

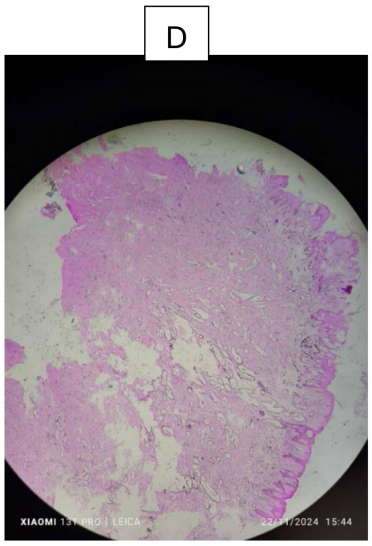


Figure 3. Iconography (D) showing syringomatous aspects at low magnification, in the form of a tadpole-shaped ductal structure with numerous glandular structures infiltrating the dermis and hypodermis compatible with a microcystic adnexal carcinoma. The patient was referred for chemotherapy but was unable to attend the sessions. The course was marked by the occurrence of a serious cranioencephalic trauma which led to the patient's death.

3. Discussion

Microcystic adnexal carcinoma is a rare malignant cutaneous adnexal tumour characterised by glandular and follicular differentiation. It is also known as sclerosing sweat duct carcinoma [1]. It is a slow-growing, locally aggressive, invasive and destructive tumour that is often diagnosed late because of its insidious course and the similarity of its symptoms to common pathologies [2] [3].

The clinical appearance of adnexal carcinomas is often nonspecific and only histopathological examination enables them to be accurately identified. Microcystic adnexal carcinoma occurs in younger subjects as a hard, scleroderma-like tumour, clinically similar to scleroderma-like basal cell carcinoma, which is its main differential diagnosis [4]-[10]. However, some authors in literature often report a mean age of diagnosis in the 5th or 6th decade. This is the case of our patient who is 62 years old.

Initial confusion with a strangulated hernia illustrates the importance of rigorous clinical assessment and multidisciplinary management. Imaging studies, such as ultrasound and CT scans, play a crucial role in orienting the diagnosis in the event of an atypical mass [6] [9] [11] [12].

In terms of treatment, there are no codified rules and no official recommendations for management. In all cases, excision with a healthy margin is recommended; the size of this margin being discussed, which may be 1 to 2 cm for forms with a propensity for local or general dissemination [5] [7] [13] [14]. Micrographic surgery may be considered in certain types. Microcystic adnexal carcinoma has metastatic potential. While it can invade surrounding tissues and has a high rate of recurrence, distant metastasis is uncommon [13]-[15]. Only a few cases of metastasis have been reported in literature to date [16]-[20]. Additional treatment with radiotherapy or chemotherapy should be discussed on a case-by-case basis [5] [6] [9]. Local recurrence and the possibility of metastases are rare, but require long-term follow-up [16] [17] [20]. The natural progression of this patient's cancer is unknown. The patient's death from an unrelated trauma is a critical piece of the case history.

4. Conclusion

This case highlights the diagnostic difficulties of recurrent inguinal swellings and underlines the importance of considering rare aetiologies such as adnexal tumours. Careful clinical assessment, combined with targeted additional investigations, is essential to avoid misdiagnosis and ensure appropriate management.

Acknowledgements

The authors would like to thank Dr. AHOMADEGBE M. for assistance with the histological diagnosis.

Ethical Aspect

Parental consent has been obtained for the use of patient data, and no image allows identification.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

[1] Hamed, N.S. and Khachemoune, A. (2015) Microcystic Adnexal Carcinoma: A Focused Review and Updates. *Journal of Dermatology & Dermatologic Surgery*, **19**, 80-85. https://doi.org/10.1016/j.jdds.2015.03.001

[2] Goldstein, D.J., Barr, R.J. and Cruz, D.J.S. (1982) Microcystic Adnexal Carcinoma: A Distinct Clinicopathologic Entity. *Cancer*, **50**, 566-572. https://doi.org/10.1002/1097-0142(19820801)50:3<566::aid-cncr2820500330>3.0.co;2-q

[3] Battistella, M. and Cribier, B. (2024) Carcinomes Annexiels. *Annales de Dermatologie et de Vénéréologie—FMC*, **4**, 309-321. https://doi.org/10.1016/j.fander.2024.03.004

[4] King, B.J., Tolkachjov, S.N., Winchester, D.S., Baum, C.L., Brewer, J.D., Arpey, C.J., *et al.* (2018) Demographics and Outcomes of Microcystic Adnexal Carcinoma. *Journal of the American Academy of Dermatology*, **79**, 756-758. https://doi.org/10.1016/j.jaad.2018.03.010

[5] Castanon, M.C.M.N., Casali, S.M.G., Lamim, R.F.B., Nagahama, M.V., Silva, C.B.X.V. and Carvalho, R.G.N.D. (2015) Microcystic adnexal carcinoma simulating scarring alopecia. *Anais Brasileiros de Dermatologia*, **90**, 36-38. https://doi.org/10.1590/abd1806-4841.20153445

[6] LeBoit, P.E. and Sexton, M. (1993) Microcystic Adnexal Carcinoma of the Skin. *Journal of the American Academy of Dermatology*, **29**, 609-618. https://doi.org/10.1016/0190-9622(93)70228-l

[7] Pugh, T.J., Lee, N.Y., Pacheco, T. and Raben, D. (2011) Microcystic Adnexal Carcinoma of the Face Treated with Radiation Therapy: A Case Report and Review of the Literature. *Head & Neck*, **34**, 1045-1050. https://doi.org/10.1002/hed.21690

[8] Moore, R.F., Zhang, X.R., Allison, D.B., Rooper, L.M., Campbell, A.A. and Eberhart, C.G. (2021) High-Risk Human Papillomavirus and ZEB1 in Ocular Adnexal Sebaceous Carcinoma. *Journal of Cutaneous Pathology*, **48**, 1027-1033.

[9] Tadrosse, A.F., Tadrosse, M.F., Ezzat, B.M., Sadek, D.M. and Langer, P.D. (2021) Second Primary Neoplasms in Patients with Sebaceous Carcinoma of the Eyelid: A Population-Based Study, 2000 to 2016. *Ophthalmic Plastic & Reconstructive Surgery*, **38**, 193-198. https://doi.org/10.1097/iop.0000000000002039

[10] Gordon, S., Fischer, C., Martin, A., Rosman, I.S. and Council, M.L. (2017) Microcystic Adnexal Carcinoma: A Review of the Literature. *Dermatologic Surgery*, **43**, 1012-1016. https://doi.org/10.1097/dss.0000000000001142

[11] Płachta, I., Kleibert, M., Czarnecka, A.M., Spałek, M., Szumera-Ciećkiewicz, A. and Rutkowski, P. (2021) Current Diagnosis and Treatment Options for Cutaneous Adnexal Neoplasms with Follicular Differentiation. *International Journal of Molecular Sciences*, **22**, Article 4759. https://doi.org/10.3390/ijms22094759

[12] Cavalieri, S., Bergamini, C., Alfieri, S., Resteghini, C., Nuzzolese, I., Colombo, E., *et al.* (2023) Management of Patients with Skin Adnexal Carcinomas. *EJC Skin Cancer*, **1**, Article 100006. https://doi.org/10.1016/j.ejcskn.2023.100006

[13] Prieto-Granada, C., Morlote, D., Pavlidakey, P., Rodriguez-Waitkus, P., Ramirez, C., Florento, E., *et al.* (2021) Poroid Adnexal Skin Tumors with yap1 Fusions Exhibit Similar Histopathologic Features: A Series of Six Yap1-Rearranged Adnexal Skin Tu-

mors. *Journal of Cutaneous Pathology*, **48**, 1139-1149. https://doi.org/10.1111/cup.14008

[14] Goyal, A., Marghitu, T., Goyal, N., Rubin, N., Patel, K., Goyal, K., *et al*. (2020) Surgical Management and Lymph-Node Biopsy of Rare Malignant Cutaneous Adnexal Carcinomas: A Population-Based Analysis of 7591 Patients. *Archives of Dermatological Research*, **313**, 623-632. https://doi.org/10.1007/s00403-020-02143-5

[15] Cavalieri, S., Busico, A., Capone, I., Conca, E., Dallera, E., Quattrone, P., *et al*. (2019) Identification of Potentially Druggable Molecular Alterations in Skin Adnexal Malignancies. *The Journal of Dermatology*, **46**, 507-514. https://doi.org/10.1111/1346-8138.14889

[16] Płachta, I., Kleibert, M., Czarnecka, A.M., Spałek, M., Szumera-Ciećkiewicz, A. and Rutkowski, P. (2021) Current Diagnosis and Treatment Options for Cutaneous Adnexal Neoplasms with Apocrine and Eccrine Differentiation. *International Journal of Molecular Sciences*, **22**, Article 5077. https://doi.org/10.3390/ijms22105077

[17] De Iuliis, F., Amoroso, L., Taglieri, L., Vendittozzi, S., Blasi, L., Salerno, G. and Lanza, R. (2014) Chemotherapy of Rare Skin Adnexal Tumors: A Review of Literature. *Anticancer Research*, **34**, 5263-5268.

[18] Worley, B., Owen, J.L., Barker, C.A., Behshad, R., Bichakjian, C.K., Bolotin, D., *et al*. (2019) Evidence-Based Clinical Practice Guidelines for Microcystic Adnexal Carcinoma. *JAMA Dermatology*, **155**, 1059-1068. https://doi.org/10.1001/jamadermatol.2019.1251

[19] Hodgson, T.A., Haricharan, A.K., Barrett, A.W. and Porter, S.R. (2003) Microcystic Adnexal Carcinoma: An Unusual Cause of Swelling and Paraesthesia of the Lower Lip. *Oral Oncology*, **39**, 195-198. https://doi.org/10.1016/s1368-8375(02)00017-9

[20] Lee, S.H., Yun, S.Y., Yu, D.S. and Lee, Y.B. (2023) Distant Metastatic Microcystic Adnexal Carcinoma. *Annals of Dermatology*, **35**, S215-S218. https://doi.org/10.5021/ad.21.083