Silent Candida tenosynovitis and abscess formation in a patient with scleroderma

Kamuran Türker¹, Candan Varlık²

¹Ministry of Health, University of Health Sciences, Istanbul Bagcilar Training and Research Hospital, Department of Infectious Diseases, Istanbul

² Ministry of Health, University of Health Sciences, Istanbul Bagcilar Training and Research Hospital, Department of Radiology, Istanbul



Purpose:

Invasive candidal infections with osteoarticular involvement are especially seen in the presence of prostheses, immunosuppression due to genetics or glucocorticoid use, or after long-term antibiotic use. It is **extremely** rare to see it in the hand¹⁻³.



The most common species responsible for most of these fungal infections is *C. albicans*. Most Candida osteomyelitis spreads hematogenously and can sometimes occur after open fractures. Tenosynovitis or costochondritis are available as case reports in the literature²⁻⁴.

Here, we present a case in which silent Candida tenosynovitis and deep tissue abscesses developed after a closed trauma.



Case:

A 59-year-old woman with a diagnosis of **scleroderma** and a history of **steroid use** experienced a fall on her right arm 7-8 months ago and started to have discharge from her palm approximately 3-4 months later.

The patient was started on amoxicillinclavulanate orally by the rheumatologist she was following, and when her complaints did not improve, she was referred to us.

In her medical history, she had a diagnosis of **DM**, **hypertension, thyroid dysfunction, and scleroderma**. The patient described having subfebrile fever.



On physical examination,

Temperature was 37.4°C, general condition was moderate, weak right hand movements were decreased,

there was slight swelling in the hand, which **was not very noticeable** from the outside,

and there was a dirty yellow purulent discharge from the mouth of a 3 mm fistula in the palm.



According to laboratory results,

white blood cell count was 12.9/μl, hemoglobin was 11 g/dl, sedimentation was 44 mm/h, and C-reactive protein was 1.9 mg/L.



On MRI,

there was widespread tenosynovitis in the flexor tendons within the carpal tunnel and increased effusion in the tendon sheaths. Dense collection areas of 5x2.5 cm adjacent to the 5th finger flexor, 4x2 **cm** dorsal to the 1st finger flexor tendon, 1.5 cm adjacent to the 4th finger, and **3.5x2 cm** adjacent to the 3rd flexor tendon at the palmar level were detected (Photo 1).

WC/WW:380.5/761J Img 7/16 Srs 8/2 MR pd_tse_fs_cor_48 TE:# TR: FA:#

TCKN:17027797202 STN:AWP175047E1 Klinik Kutuphane Sieme

10mm

DE%100 Vw%50 MagP:2.2 MagA%:24.6



16

CURRENT El Klinik Kutuphane COSKUN^INCI Acc:UCS290930642 pd_tse_fs_cor_480 6.01.2024 13:29 # TCKN:17027797202 STN:AWP175047El Klinik Kutuphane Sieme WC/WW:393.5/787.0 Img 9/16 Srs 8/22 MR pd_tse_fs_cor_480 TE:# TR:# FA:# #

10mm

DL%100 Vw%50 MagP:2.2 MagA%:24.6



16

JRRENT Klinik Kutuphane DSKUN^INCI cc:UCS290930642 d_tse_fs_cor_480 01.2024 13:29

CKN:17027797202 IN:AWP175047El Klinik Kutuphane eme

10mm





WC/WW:457.5/915.0 Img 11/16 Srs 8/22 MR pd_tse_fs_cor_480 TE:# TR:# FA:# #

16

El-bilek (SAG) iki yon INCI^COSKUN 27.07.2023

10mm

L R\F DL%100 Vw%0 MagP:0.5 MagA%:42.6







Conclusion:

Although invasive candidal infections are very rare, with **2-14 cases per 100,000**, their **mortality** is quite high at **40-55%**⁵.

They are mostly seen in patients with multiple comorbidities who receive broad-spectrum antibiotics after long-term hospitalization in the intensive care unit.

In Candida osteoarticular involvement, the intervertebral area and sternum are most commonly seen, while the incidence in **hands** and **feet** is only **around 3%**⁴.

Therefore, we found it appropriate to present this rare case.



References:

- 1-Gamaletsou MN, Kontoyiannis DP, Sipsas NV, Moriyama B, Alexander E, Roilides E, Brause B, Walsh TJ. Candida osteomyelitis: analysis of 207 pediatric and adult cases (1970-2011). Clin Infect Dis. 2012;55(10):1338. Epub 2012 Aug 21.
- 2-<u>Tenazinha</u> C¹, <u>Barros</u> R¹, <u>Romão</u> V.C¹ Candida albicans tenosynovitis of the hand ARP Rheumatol. 2022 Apr-Jun;1(2):183-184.
- <u>3-Yuan</u> R T, <u>Cohen</u> M J. Candida albicans tenosynovitis of the hand. J Hand Surg Am 1985 Sep;10(5):719-22.
 doi: 10.1016/s0363-5023(85)80217-3.
- 4-Nakamura H, Makiguchi T, Tsunoda A, Shirabe K, Yokoo S. <u>Candida Costochondritis</u> <u>Induced by Traumatic Small Bowel Perforation: A Case Report.</u>
 Cureus. 2023 Aug 22;15(8):e43923. doi: 10.7759/cureus.43923. eCollection 2023 Aug.
- 5-Soriano A, Honore PM, Puerta-Alcalde P, Garcia-Vidal C, Pagotto A, Gonçalves-Bradley DC, Verweij PE. Invasive candidiasis: current clinical challenges and unmet needs in adult populations. J Antimicrob Chemother. 2023 Jul 5;78(7):1569-1585. doi: 10.1093/jac/dkad139.





10mm

D198100 Vw88100 MagPi0,4 MagA8831.7



R



