

A vascular graft infection nightmare secondary to *Candida albicans*

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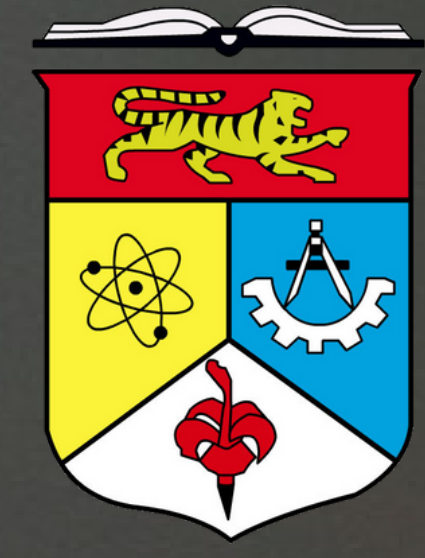
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INTRO

Femoral-femoral bypass surgery involves creating a bypass around a blocked or narrowed section of the femoral artery, which is a major blood vessel in the leg. During the procedure, a polytetrafluoroethylene (PTFE) graft, which is a synthetic material commonly used in bypass surgery, is sewn into place to redirect the flow of blood around the blocked area. However, in some cases, the PTFE graft may become infected after surgery, leading to a potentially serious complication. In this case report, we present the case of a patient who developed a *Candida albicans* infection in a femoral-femoral bypass using a PTFE graft. This rare but serious complication required urgent surgical intervention and long-term antifungal treatment.

DISCUSSION

Vascular graft infections caused by *Candida albicans* are uncommon but can have severe consequences if left untreated. These infections can occur for a number of reasons, such as poor sterilization of the graft before surgery, contamination during the procedure, or preexisting health conditions of the patient. Early diagnosis and treatment are crucial to prevent the infection from worsening.

CASE DESCRIPTION

A 54-year-old man with a history of smoking and diabetes underwent a femoral-femoral bypass surgery using a PTFE graft for the treatment of his acute lower limb ischemia. However, he developed a complication in the form of a leaking pseudoaneurysm at the site of the bypass graft. A computed tomography angiography (CTA) scan revealed a pseudoaneurysm at the junction of the right femoral artery and the graft site, with a large thrombosed component. As a result, the patient required urgent surgery to repair the bypass and remove the PTFE graft. An axillo-femoral bypass was created to reperfuse the previously affected left ischemic leg. During the surgery, tissue and aneurysmal graft samples were taken and cultured, resulting in the growth of white colonies with a star-shaped edge on blood agar, creamy white colonies on Sabouraud dextrose agar, and green colonies on CHROMagar. The isolate was identified as *Candida albicans* using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry and was found to be susceptible to fluconazole. The patient was treated with long-term fluconazole with good clinical improvement.

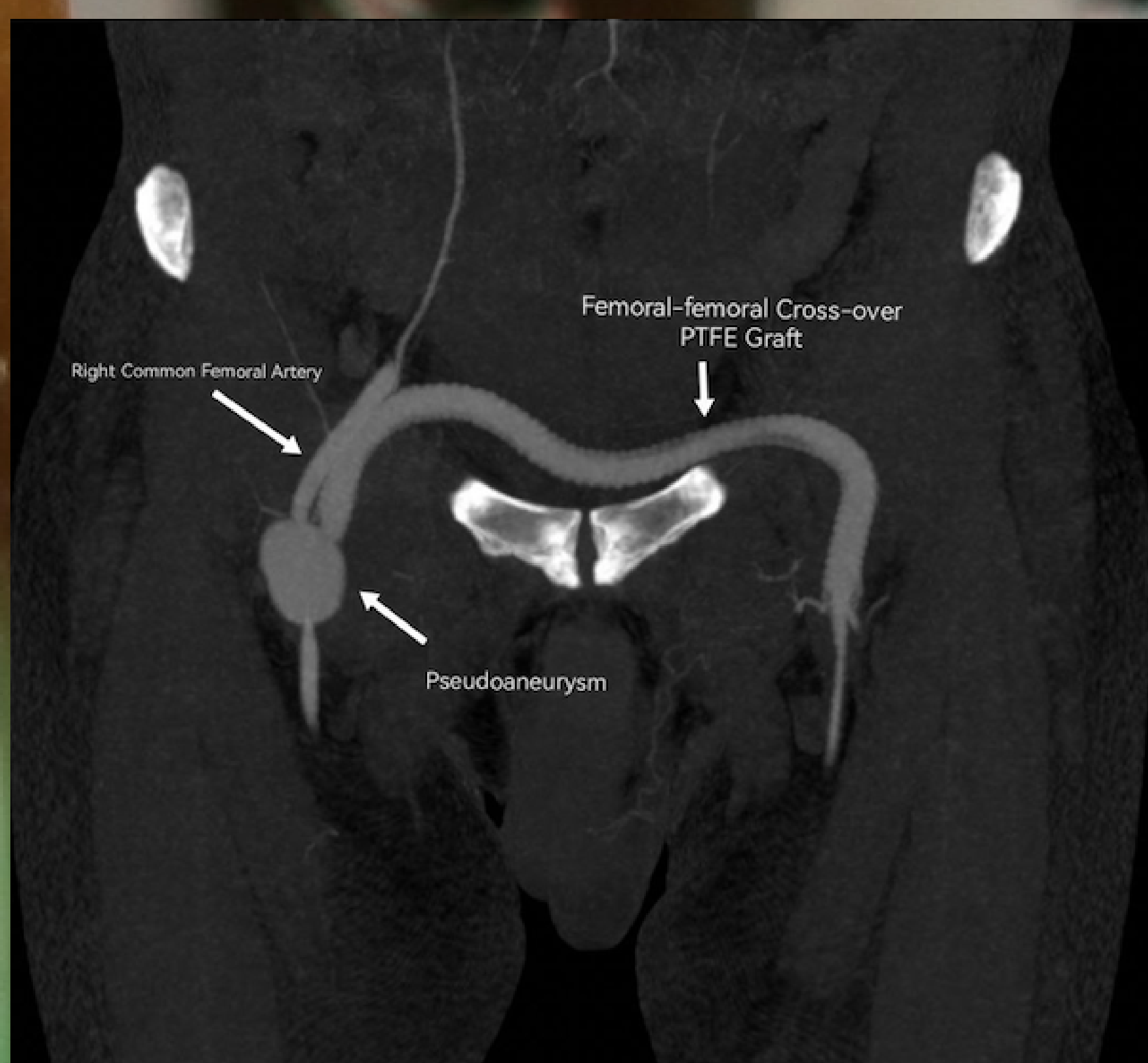


Figure 1: Maximum intensity projection (MIP) of CT angiogram bilateral lower limbs in coronal section showing a pseudoaneurysm arising from the junction of the right common femoral artery and femoral-femoral cross-over PTFE graft.

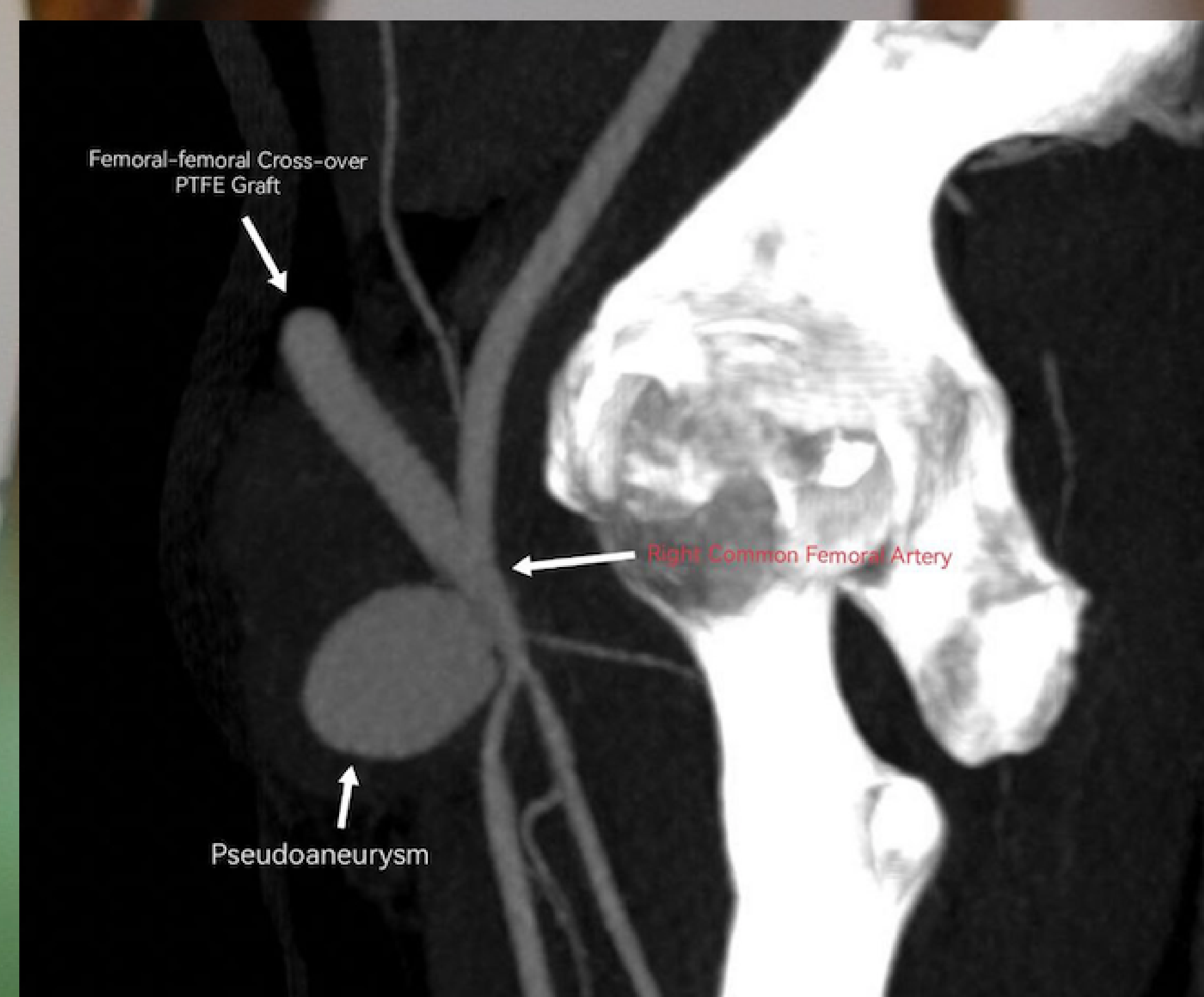


Figure 2: Maximum intensity projection (MIP) of CT angiogram bilateral lower limbs in sagittal section showing a pseudoaneurysm arising from the junction of the right common femoral artery and femoral-femoral cross-over PTFE graft.



Figure 3: A. Growth on blood agar. B. Growth on CHROMagar

13. Case reports and case series (n<10)

13.

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Background

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Case(s) description

A 54-year-old man with a history of smoking and diabetes underwent a femoral-femoral bypass surgery using a PTFE graft for the treatment of his acute lower limb ischemia. However, he developed a complication in the form of a leaking pseudoaneurysm at the site of the bypass graft. A computed tomography angiography (CTA) scan revealed a pseudoaneurysm at the junction of the right femoral artery and the graft site, with a large thrombosed component. As a result, the patient required urgent surgery to repair the bypass and remove the PTFE graft. An axillo-femoral bypass was created to reperfuse the previously affected left ischemic leg. During the surgery, tissue and aneurysmal graft samples were taken and cultured, resulting in the growth of white colonies with a star-shaped edge on blood agar, creamy white colonies on Sabouraud dextrose agar, and green colonies on CHROMagar. The isolate was identified as *Candida albicans* using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry and was found to be susceptible to fluconazole. The patient was treated with long-term fluconazole with good clinical improvement.

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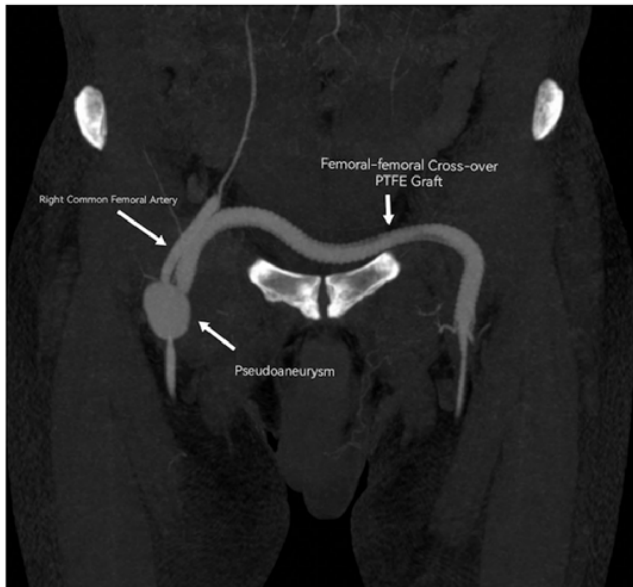


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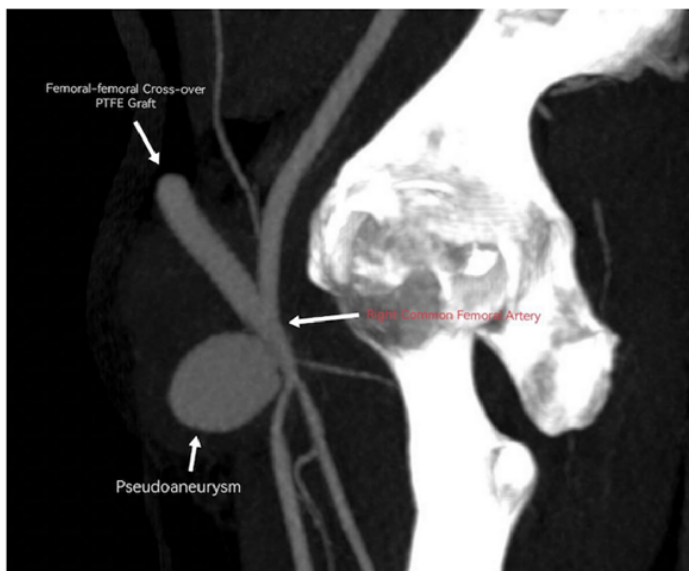


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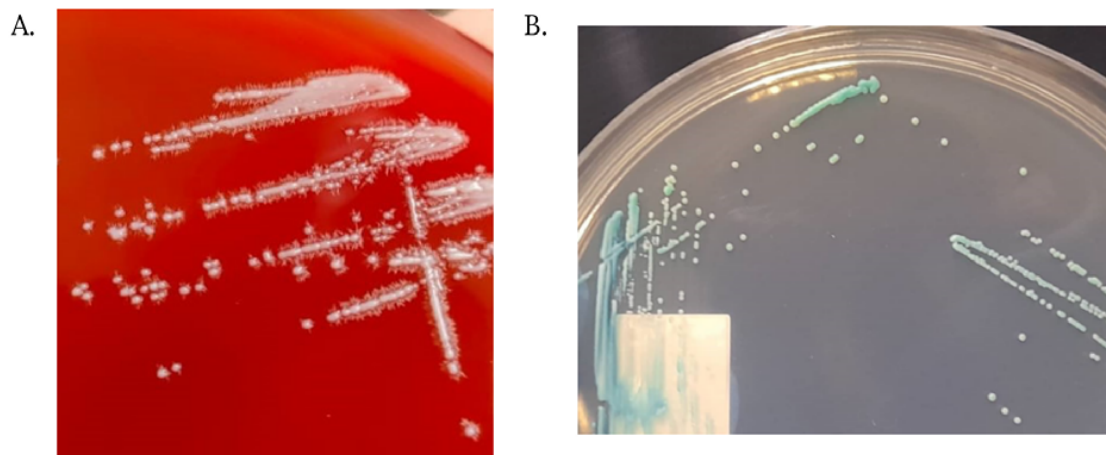


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Keyword 1

Fungi and clinical mycology

Keyword 2

Treatment and clinical management

Keyword 3

vascular graft infection

Conflicts of interest

Do you have any conflicts of interest to declare?

No



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Basel, 28th April 2023

ECCMID 2023 Paper Poster presentation certificate

To whom it may concern:

We hereby confirm that the below abstract was submitted, accepted, and presented at the 33rd ECCMID (European Congress of Clinical Microbiology and Infectious Diseases), which took place in Copenhagen, Denmark, from 15 – 18 April 2023.

Poster Title: A vascular graft infection nightmare secondary to *Candida albicans*

Presenting Author: Zainulabid Ummu Afeera

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Session Title: 13c. Fungal infections

Abstract/ePoster Number: 6499/P3377

Sincerely yours,

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ECCMID Programme Director



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Sincerely yours,

Jacob Moran-Gilad
ECCMID Programme Director



Ummu Afeera Zainulabid <ummuafeera@gmail.com>

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33rd ECCMID**Copenhagen, Denmark**
15–18 April 2023The congress of  **ESCMID**

Basel, 30/01/2023

Dear Ummu Afeera Zainulabid,

Thank you for submitting an abstract to the 33rd European Congress of Clinical Microbiology and Infectious Diseases - [ECCMID 2023](#).

Abstract number: 06499

Title: **A vascular graft infection nightmare secondary to *Candida albicans***

The ECCMID 2023 Programme Committee is pleased to inform you that your abstract has been accepted for an poster presentation, and allocated to the following session:

Session type: Poster Session

Poster number : P3377

Session title: 13c. Fungal infections

Session date: 18/04/2023

Session time and location : 12:00 in Poster Area

Due to the hybrid nature of ECCMID 2023, in addition to the paper posters presented onsite, all accepted posters must be uploaded as ePoster to our platform no later than the **1st of April 2023**. You will receive ePoster upload detailed instructions after you complete registration for the congress.Please make sure to include the provided poster number on the printed and electronic versions of your poster. You will find additional [technical instructions](#) and poster [templates](#) on our websiteIf you are not the presenting author of this abstract, please forward this notification to the presenting author and inform the Abstract Team at eccmidabstracts@escmid.org.**Please note**

- the upcoming ECCMID 2023 will take place in Copenhagen, Denmark, on **15-18 April 2023** as a hybrid event. In addition to onsite presence, the event will be live-streamed online for participants unable to join us in Copenhagen
- the presenting author must register before **1st of April 2023**. Abstracts without a registered presenting author will not be included in the final ECCMID 2023 programme
- if you are unable to attend onsite or online, please inform us about abstract withdrawal before **1st of April 2023**
- early-bird registration is available until the **8th of February 2023**

To register now, please visit the [congress website](#). For any inquiries regarding registration please get in touch with eccmidregistration@escmid.org.

ECCMID 2023 registration includes access to six online-only events that will take place before and after the congress. The [Pre- & Post-ECCMID Days](#) are an integral part of the 2023 scientific programme and will feature the following:

Pre-ECCMID events

- Emerging Public Health challenges - 15th February 2023, 16:00 - 19:00 CET
- Global Health issues post-COVID - 16th February 2023, 16:00 - 19:00 CET
- Controversies in AMS - 15th March 2023, 16:00 - 19:00 CET
- AMR - old problems, new challenges - 16th March 2023, 16:00 - 19:00 CET

Post-ECCMID events

- Viral diseases, just not COVID - 24th May 2023, 16:00 - 19:00 CEST
- Advances in infection diagnosis - 25th May, 16:00 - 19:00 CEST

We congratulate you on the acceptance of your abstract and are looking forward to seeing you in Copenhagen. If you have any questions or need assistance, please contact us at eccmidabstracts@escmid.org.

Yours sincerely,

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