

Introduction

- *Mycobacterium abscessus* is a rapidly growing mycobacterium (RGM) that is ubiquitous in soil and water.
- There have been an increasing number of skin and soft tissue infections with *M. abscessus* arising from the use of improperly sterilized water and equipment during surgical procedures.
- Here we present a case of macrolide resistance *Mycobacterium abscessus* presenting as a soft tissue infection of a patient who underwent a Brazilian butt lift in the Dominican Republic.

Case Presentation

- A 40 year old female presented for evaluation of soft tissue infection. She had undergone a Brazilian butt lift in the Dominican Republic 3 months prior.
- She complained of boils, draining abscesses, and pain in her bilateral buttocks.
- She underwent an incision and drainage of one of the abscesses with wound cultures growing 2+ *Mycobacterium abscessus* that was macrolide resistant.
- She received 8 weeks of induction therapy with Imipenem, Amikacin, and Linezolid, following which time she was transitioned to Omadacycline and Clofazimine. At 12 week follow-up, her skin lesions had improved.

Relevant Laboratory Data

- At first ED appearance in Jan. 2023:
 - WBC 7.8
- At first outpatient encounter in Feb 2023:
 - WBC 10.1, CRP 10.3, ESR 38

Imaging



Figure 1. Top images from initial outpatient encounter and bottom images after treatment.

Discussion

- Mycobacterium abscessus complex (*MABC*) represents a group of non-tuberculous mycobacterium (NTM) that comprises three subspecies: *M. abscessus subsp. abscessus*; *M. abscessus subsp. bolletii*, and *M. abscessus subsp. Massiliense*.
- While pulmonary infection with *MABC* is most common, recently skin and soft tissue infections (SSTI) have been increasing due to contamination of surgical instrumentation.
- Treatment is difficult due to bacterial resistance to standard anti-tuberculosis agents as the *abscessus* subspecies contain a functional erythromycin resistance methylase (*erm*) gene, which causes inducible resistance to macrolides (1).
- Source control is important: drainage of all abscesses and removal of any infected foreign bodies.

Conclusion

- An increasing number of SSTIs caused by *M. abscessus* have been reported in cases of medical tourism after cosmetic or surgical procedures.
- With an estimated 1.4 million Americans traveling overseas each year for medical treatment, the ability to recognize SSTI with *M. abscessus* has become critical as delayed initiation of treatment can have devastating consequences.

References

1. Lee MR, Sheng WH, Hung CC, Yu CJ, Lee LN, Hsueh PR. Mycobacterium abscessus Complex Infections in Humans. *Emerg Infect Dis.* 2015;21(9):1638-1646. doi:10.3201/2109.141634
2. Leto Barone, Angelo A. MD et al. Atypical Mycobacterial Infections After Plastic Surgery Procedures Abroad: A Multidisciplinary Algorithm for Diagnosis and Treatment. *Annals of Plastic Surgery* 84(3):p 257-262, March 2020. doi:10.1097/SAP.0000000000002061
3. Moreno-Izquierdo C, Zurita J, Contreras-Yametti FI, Jara-Palacios MA. Mycobacterium abscessus subspecies abscessus infection associated with cosmetic surgical procedures: Cases series. *IDCases.* 2020;22:e00992. Published 2020 Oct 25. doi:10.1016/j.idcr.2020.e00992

Liposuction and gluteal augmentation

ED visit CT shows superficial infection

AFB+ cultures

Dec. 12 2022

Jan. 15 2023

Feb. 9 2023

Dec. 21 2022

Feb. 5 2023

First appearance of abscesses and boils

I&D at Urgent Care