



# Skin Deep

The price of beauty

Matthew Laundry  
OPAT lead  
Consultant Microbiologist  
Infection Care Group

# Our OPAT service (1)

- Established 2009
- Primarily a early discharge service for complex infections:
  - Bone and Joint infections inc spinal infections
  - Endocarditis and endovascular infections
  - Necrotising otitis externa
  - Complex intra-abdominal infections
  - Complex Cellulitis esp lymphoedema
  - Non tuberculous mycobacteria (replaced TB)
- Uncomplicated cellulitis requiring IV managed as day visits to acute assessment area by acute medicine.

# Our OPAT service (2)

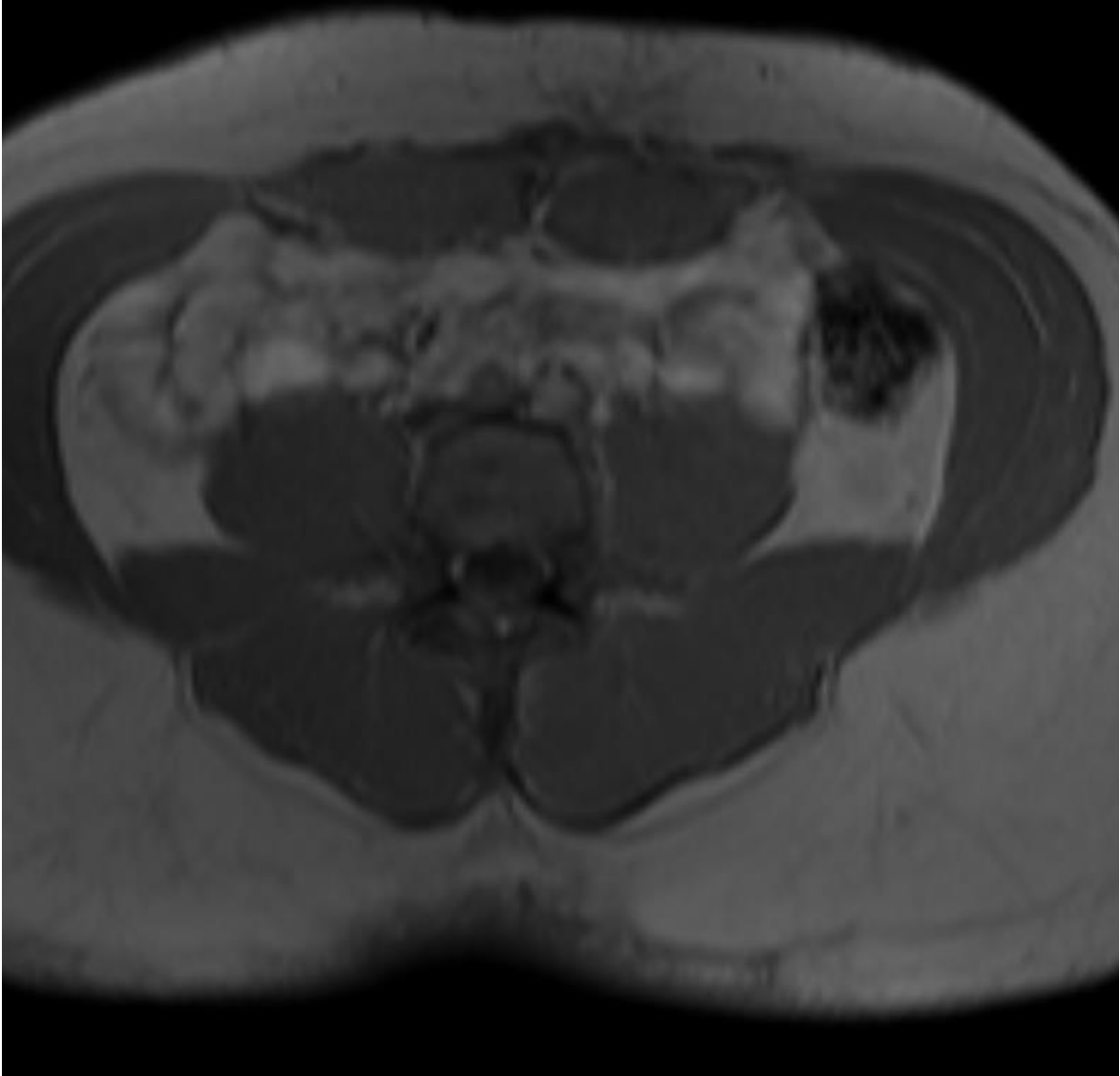
- Public – private model
- In hospital services provided by St Georges – 2 x OPAT nurses, consultants, trainees and clinical pharmacist support.
- Compounding and delivery of drugs, ancillaries and refrigerators provide by Baxter Healthcare.
- Drugs usually compounded in elastomeric devices and administered via PICC.
- Nursing sub-contracted out by Baxter to Bionical to provide OPAT care.

# Patient X – 42 year afro- caribbean female.

- 2017 - had abdominoplasty in Dominican Republic
- 2018 - noted abdominal wounds not healing, seen by GP in London who sent wound samples (positive for *Mycobacterium abscessus*)
- Dec. 2019 - Surgical intervention (infected tissue debridement) in a local DGH hospital

- **Microbiology sensitivities:** MIC to *M. abscessus*
- **Amikacin= 8 sensitive**
- **Tobramycin = 8 resistant**
- **Doxycycline =>16 resistant**
- **Moxifloxacin= 8 resistant**
- **Clarithromycin=>16 resistant**
- **Cotrimoxazole=>8/152 resistant**
- **Linezolid=16 interemediate but reported as resistant**
- **Ciprofloxacin=2 intermediate but reported as resistant**
- **Tigecycline 0.5**
- **Imipenem 16**
- **Co-amoxiclav >64**
- **Cefoxime >32**
- **Cefuroxime >64**

A



MRI March  
2020

# Admission

- Admitted 13/5/2020
- Decision not to do further debridement.
- Started on anti-mycobacterial drugs
  - Amikacin IV 1g OD – reduced to 750mg OD
  - Tigecycline IV 50mg BD
  - Linezolid PO 600mg BD
  - Ciprofloxacin 750mg BD
- Could not tolerate Tigecycline or Linezolid. Prolonged inpatient stay to work through all the drug intolerances
- Got funding for Bedaquiline - £18 000 for six months.

# OPAT

- Discharged on OPAT 4/6/2020
- IV Amikacin via OPAT x 3 per week for 8 weeks
- Bedaquiline po
- Ciprofloxacin po
  
- ECG -remained no evidence of prolonged QTc
- Renal function normal
- Some tinnitus but no evidence of hearing abnormalities, hence Amikacin stopped.

# Covid related issues

## First lockdown 21 March 2020 – 4 July 2020

- Inability to come in for review exacerbated by living over 2 hours from hospital.
- Audiology department decamped home during first lockdown – very difficult to get audiology investigations while on Amikacin.
- Occasional issue of nursing staff going in.
- Patient Covid negative.



# Followup

- Made excellent recovery.
- At end of six months of Bedaquiline, sinus had dried up and she felt great.
- Six months after completing (1 year after presentation) the sinus has reopened and discharging again.
- MRI very similar to March 2020
- Systemically well.
- Wound swab still growing *M. abscessus*
- Discussion with national NTM MDT - decision made for no further antimicrobial treatment at that stage but for surgical management first.

# OPAT and further follow-up

- 17/02/2022 - Debridement under plastic surgery
  - Sinus on left upper abdomen excised
  - Exploratory incision made above umbilicus - interconnection with upper abdomen sinus but no collection or pus
  - Sinus along abdominoplasty scar excised
  - Tissue did not grow NTM but a *S.aureus*.
- Started on flucloxacillin for *S. aureus*.
- Discharged 18/02/2022
- Delay awaiting funding approval for bedaquiline and clofazimine.
- 08/03/2022 Admitted onto OPAT for 3 months of Amikacin 3 times weekly self administered, plus bedaquiline and clofazimine.
- Completed and discharged off OPAT 28/05/2022
- For 12 months of bedaquiline if funding approved.

Thank You

- Angela Houston.  
[angela.houston@stgeorges.nhs.uk](mailto:angela.houston@stgeorges.nhs.uk)
- [matthew.laundy@stgeorges.nhs.uk](mailto:matthew.laundy@stgeorges.nhs.uk)