Shigella sonnei: a resource for sexual health & HIV services

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Consider *Shigella* in patients with diarrhoea, especially bloody, and/or proctitis

Send stool for bacterial PCR/culture in all symptomatic MSM

*Shigella* can be sexually transmitted
Take a sexual history 
+/- Refer for STI screen

There’s an XDR *S.sonnei* outbreak in the UK

Do not treat outpatients with antibiotics unless persistent & discuss with microbiology

Inform your local primary care networks & EDs

Notify cases to local Health Protection Teams for enhanced UKHSA surveillance

Developed by BHIVA, BASHH & UKHSA January 2022
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Aim

• Goals of this slide set:
  – To support Sexual Health & HIV services to educate their local teams & networks about the management of shigellosis
  – To combine available information in a single resource
• Please check the latest UKHSA advice
Background

• There are 4 *Shigella* species that cause diarrhoeal illness (shigellosis or bacillary dysentery)
  – *S. sonnei*
  – *S. flexneri*
  – *S. boydii*
  – *S. dysenteriae*

  
  
  
  
  Endemic in UK, can also cause travel-associated diarrhoea
  Outbreaks linked to sexual transmission in MSM

  
  
  
  
  Not endemic in UK, travel-associated diarrhoea

  
  
  
  
  Most cases have self limiting gastroenteritis and do not require antimicrobial treatment
Current UK situation

- Increase in **XDR Shigella sonnei** in men in the UK
  - n=41 01/09/2021-17/01/2021, 95% in men, mainly London
  - WGS: t10.377 cluster (large, MDR cluster in MSM since 2018; but very little activity between March 2002 and August 2021)

- **RESISTANCE MARKERS AGAINST:**
  - macrolides, fluoroquinolones, aminoglycosides, sulphonamides, trimethoprim and tetracyclines
  - most recent strains from carry **bla**_{CTX-M-27} associated with **ESBL** production) = **ceftriaxone** resistance
Put simply:

1\textsuperscript{st} line agents such as:

- Quinolones
- Macrolides (Azithromycin)
- Ceftriaxone
- Aminoglycosides (Gentamicin)

Will \textbf{not} be effective for this outbreak strain
Clinical presentation

• Can be asymptomatic
  – 26% in a recent study of MSM in Australia\(^1\)
• Diarrhoea, typically containing blood &/or mucus
• Anorectal pain
  – 86% in symptomatic MSM vs 21% reporting diarrhoea\(^1\)
• Tenesmus
• Abdominal cramps
• Nausea/vomiting
• Fever

Management

• Sexual history (particularly adult men) & travel history
• Notify local Health Protection Team (consider occupation)
• Enhanced surveillance questionnaire
• Hygiene, isolation & symptom management as per NHS guidance: https://www.nhs.uk/conditions/dysentery/
Treatment

• **Not required for most**
  – Most well enough for outpatient management do not need treatment unless persistent (diarrhoea >7 days)

• **Antibiotics required for**
  – Severe symptoms (fever, bloody diarrhoea, sepsis)
  – People requiring hospital admission
  – People with underlying immunodeficiency
Treatment for XDR S. sonnei (t10.377)

Discuss with microbiology as several different 
*Shigella* strains with variable antibiotic susceptibility endemic in MSM

- **Oral**
  - Chloramphenicol
  - Mecillinam, fosfomycin (off label, uncomplicated* only)

- **Intravenous (1st choice for severe illness or in those who are immunocompromised)**
  - Ertapenem
  - Meropenem

*e.g. prolonged diarrhoea*
Key messages

• *Shigella* can be sexually transmitted
• Take a sexual history in people presenting with an acute diarrhoeal illness
• Confirmed *Shigella* in adult men warrants a full STI screen
• Must send stool samples for microbiology for bacterial PCR/culture
• Do not treat unless clinically indicated & always send a stool sample first
  – Very limited treatment option for XDR *S. sonnei*, discuss with microbiology
Actions for SH & HIV services


• Signpost patient advice: [https://www.sexwise.org.uk/stis/shigella](https://www.sexwise.org.uk/stis/shigella)

• Liaise with local primary care networks, EDs, ID & acute medicine teams to raise awareness & promote local referral routes
  – Please use these materials!

• BASHH disseminated UK HSA advice in December 2020
  – Please share
Further reading

• Public health operation guidelines on Shigellosis

• Chow et al: non-classical pathogens & proctitis in MSM
  – https://academic.oup.com/ofid/article/8/7/ofab137/6178933

• BASHH-disseminated UK HSA alert
  – https://mcusercontent.com/34a6e1d119a7dd8e6d04d1611/files/b19f5936-e2e7-0fc2-2784-4caad71d5657/XDR_S_sonnei_Note_to_BASHH_Dec_2021_final_2_.pdf
THINK SHIGELLA!

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Thank you