

# STENOTROPHOMONAS MALTOPHILIA: CASE SERIES DEMONSTRATING THE INCREASED PREVALENCE IN A SINGLE CENTRE UK HAEMODIALYSIS UNIT.

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## INTRODUCTION

- Stenotrophomonas maltophilia (S. maltophilia) is a gram-negative, aquatic pathogen.
- An increase in incidence of this opportunistic pathogen coupled with the development of multi-drug resistant properties has made the management of S. maltophilia problematic.
- Haemodialysis (HD) patients are the ideal target as they are immunocompromised with artificial access points.
- There have been several reported cases of S. maltophilia in our single HD centre within the past 3 years.

## METHODS

- A retrospective analysis of blood culture results obtained over a 3 year period from a single HD centre, followed by a case review of any patient found to have a positive culture for S. maltophilia.

### CASE 1

- 30 yo male with ERSD due to vesicoureteric reflux
- HD dependent via a femoral permcath
- Became acutely unwell on dialysis with rigours
- Blood cultures taken from HD line grew S. maltophilia
- Managed with Linezolid and Gentamicin but changed to Ciprofloxacin and Septrin after discussion with microbiology
- Discharged but became unwell a few weeks later and required further admission.: blood cultures again positive for S. maltophilia
- Line was replaced

### CASE 2

- 44 yo female with ERSD secondary to reflux nephropathy
- Peritoneal dialysis (PD) patient who reported constant abdominal pain
- Peritoneal fluid grew S. maltophilia sensitive only to Septrin which she could not have due to previous acute intermittent porphyria
- Managed with Meropenem, IP Vancomycin and Gentamicin
- PD catheter was replaced

### CASE 3

- 80 yo male with ERSD secondary to hypertensive renal disease and chronic urate nephropathy
- PD patient who reported intermittent abdominal pain
- Peritoneal fluid grew S. maltophilia and coag negative staph
- Managed with Septrin, IP Vancomycin and Gentamicin
- PD catheter was replaced

## DISCUSSION

- In Northern Ireland we have seen an increase of 115.6% in reported cases of S. maltophilia between 2011-15.
- In our own renal unit we have noticed an increase in the prevalence of this organism with associated adverse events for our susceptible patient groups.
- All patients who contracted this organism had an access port: 2 had PD catheters, 1 had a femoral line.
- Our patients were managed with a combination of Septrin, Vancomycin and Gentamicin.
- Whilst this resulted in only 1 episode of pathogen recurrence all patients required replacement of access points.

## CONCLUSIONS

- S. maltophilia is an increasingly prevalent, opportunistic pathogen with evolving drug resistance.
- HD patients are particularly susceptible as they are more likely to be immunosuppressed and to have access points.
- It is likely that this organism will continue to be encountered with increasing regularity. Further research could be related to optimising the antibiotic regimen we use in our HD centre by forming a treatment policy.

References :<https://uk.pinterest.com/pin/472455817132032641/>, <https://www.gov.uk/guidance/stenotrophomonas-maltophilia>

