QAH
QUEEN ALEXANDRA Hospital

Portsmouth Hospitals NHS
NHS Trust

Chloramphenicol use in Geriatric Medicine at Queen Alexandra Hospital, Portsmouth: an observational analysis

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Introduction

At the time of this observational study at Queen Alexandra Hospital (QAH), chloramphenicol was the first-line antibiotic choice for treatment of:

- healthcare-associated pneumonia
- healthcare- associated aspiration pneumonia
- infective exacerbation of COPD requiring intravenous treatment (with penicillin allergy)
- severe community acquired pneumonia requiring intravenous treatment (with penicillin allergy)

This was a recent change, from piperacillin-tazobactam (Tazocin), driven by recent CQUIN targets.

Following this change, there had been anecdotal concerns raised by geriatricians about the use of chloramphenicol in this patient group, particularly efficacy and side effects. Therefore we undertook an observational study to review these concerns.

Methodology

During the period of February-March 2017, we analysed the notes of all patients on the eight elderly care wards at QAH who were treated with chloramphenicol (35 patients). Data was collected for 27 patients. For 8 patients we were unable to collect data (6 were discharged or died prior to note review and we were unable to locate the notes of the other 2 patients). We reviewed the medical notes for patient demographics, allergies; and documented clinical response, blood results and available imaging at days 3, 7 and 14. Previous/subsequent antibiotic courses were also reviewed.

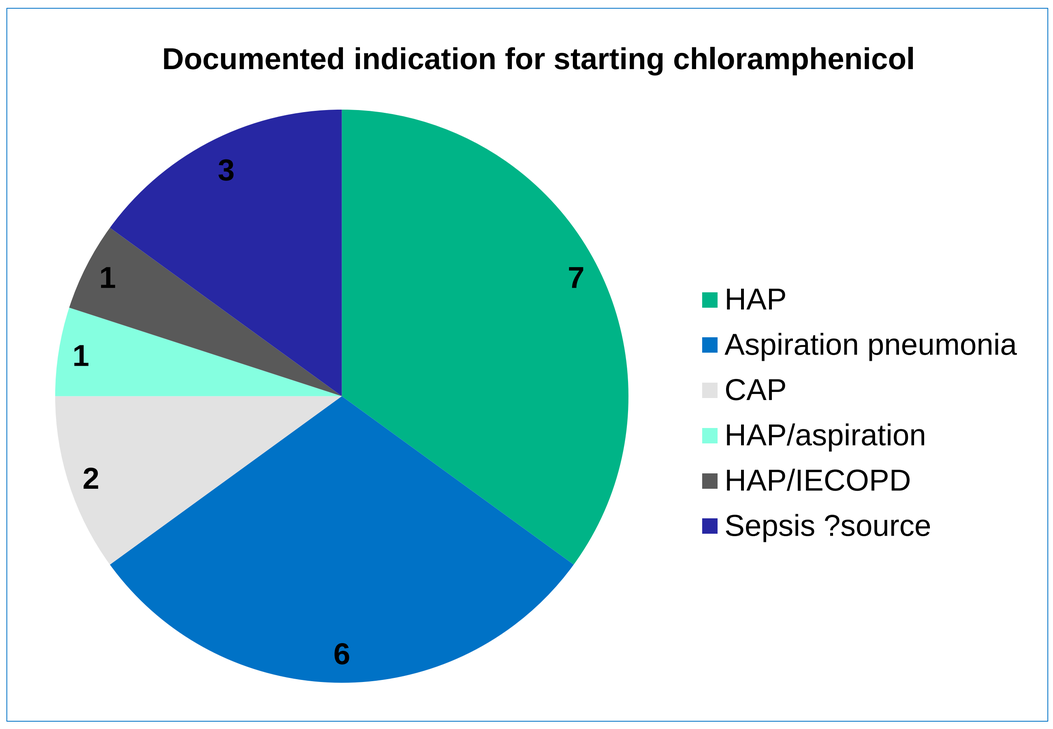
Results

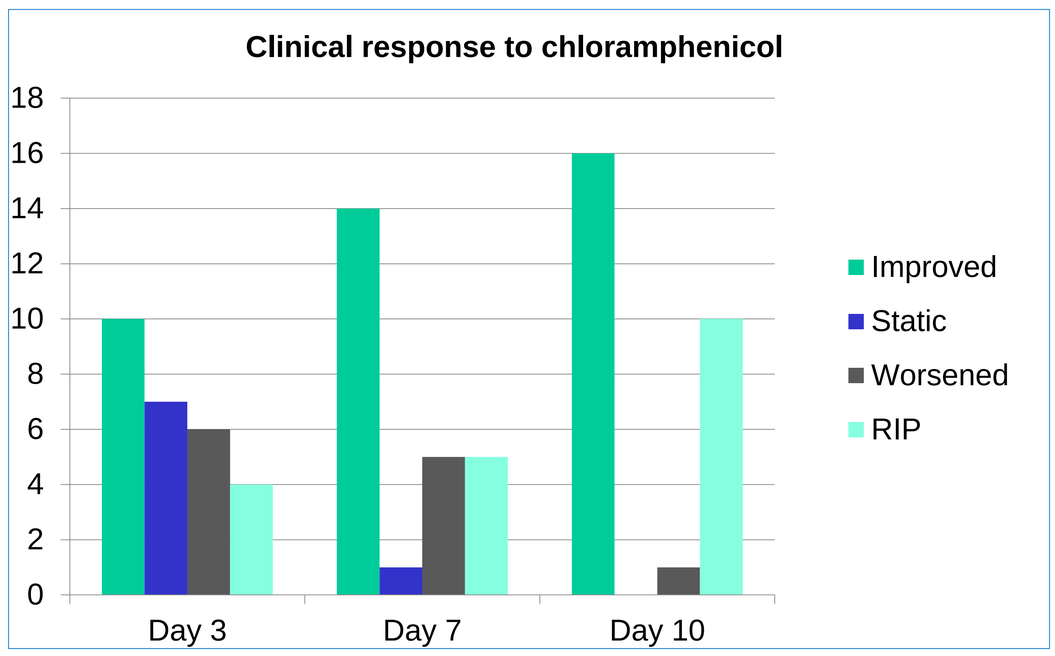
Average duration of chloramphenicol was 4.4 days. At day 3, 10/27 were felt to have clinically improved, 4/27 had died. At day 7, 14/27 had improved. By day 14, 16/27 had improved, 10/27 had died. Of the 20 patients who had had antibiotics in the 7 days prior to chloramphenicol, 13 patients had improved clinically at day 14 (65%).

Of the 7 patients who did not have antibiotics before having chloramphenicol, only 3 showed improvement at day 14 (43%) – perhaps suggesting that having antibiotics prior to chloramphenicol improved outcome, compared with those who were treated with chloramphenicol initially. CXR appearance at the start of treatment did not appear to be associated with any difference in clinical response to chloramphenicol.

There did not appear to be correlation between having a higher number of significant comorbidities and having a poorer outcome.

Number of significant comorbidities	Number of patients
1-2	11
3-5	12
More than 5	4





Conclusion

Although this was a small observational study in a specific patient group, chloramphenicol appears to be effective in treating conditions that it is recommended for in our antibiotic protocol. We feel there is a possible delay in clinical response, perhaps owing to the bacteriostatic mode of action. We noted a trend to escalate antibiotics prior to completing a full course of chloramphenicol in patients with significant frailty, due to poor clinical response early on in treatment. Within our sample, only one patient had chloramphenicol stopped due to concern about side effects (deranged liver function) We note that this is not listed as a side effect within the BNF but seems to be an anecdotal concern.

References

Joint Formulary Committee. *British National Formulary.* London: BMJ Group and Pharmaceutical Press; 2015.
Microguide: Portsmouth Hospitals NHS Trust Adult Antimicrobial Guide; available at http://microguide.horizonsp.co.uk/viewer/pht/adult