NHS University Hospitals Bristol and Weston NHS Foundation Trust



Samantha **Hunt**
Bristol Eye Hospital



Helen **Garrott**
Bristol Eye Hospital



Rebecca **Ford**
Bristol Eye Hospital

# Clinicians should ***consider withdrawing*** routine use of prophylactic chloramphenicol ointment after eyelid surgery where wounds are primarily closed

## Bringing eyelid surgery in line with international guidelines around peri-operative antibiotics: A pilot study

### Why does this matter?

- International guidelines advise against prophylactic antimicrobials for primarily closed surgical wounds
- Most oculoplastic surgeons report routinely using chloramphenicol post-operatively
- Antimicrobial resistance is increasing – antimicrobials should be reserved for those who really need it

### Methods

**Retrospective audit**
- Primary closure of wounds
- ≥ 1/52 post-operative chloramphenicol
- ≥ 3/12 post-op
- Cancer cases excluded
- EMR reviewed for evidence of infection

**Local policy changed**
- Prophylactic chloramphenicol withdrawn for these patients

**Re-audit**
- Primary closure of wounds
- NO chloramphenicol
- ≥3/12 post-op
- Cancer cases excluded
- EMR reviewed for evidence of infection

### Results

Evidence of surgical site infection in:

14 of 872 eyes **(1.6%)** WITH post-op chloramphenicol

3 of 133 eyes **(2.25%)** WITHOUT chloramphenicol

NOT statistically significant




### Take-home messages

- Post-op wound infection rates are low after elective eyelid surgery
- Routine use of prophylactic antibiotics does not adhere to international guidelines
- Infection rates appear to stay low WITHOUT use of prophylactic chloramphenicol in these patients
- Antimicrobial resistance is everybody's responsibility – does your patient really need them?

| | | Chloramphenicol used | | Chloramphenicol withheld | | p value (<.05 in bold) |
|---|---|---|---|---|---|---|
| Total | Eyes | 872 | | 133 | | |
| | Patients | 717 | | 107 | | |
| | Procedures | 1044 | | 154 | | |
| Age | Mean +/-SD | 72 +/- 17 | | 73 +/- 19 | | 0.721 |
| | Range | Mar-98 | | Apr-97 | | |
| | | Number | % | Number | % | |
| Eyes | Right | 290 | 40.4 | 36 | 33.6 | |
| | Left | 272 | 37.9 | 45 | 42.1 | |
| | Bilateral | 155 | 21.6 | 26 | 24.3 | |
| Operating Surgeon | Unclear | 1 | 0.1 | 1 | 0.8 | 0.1246 |
| | OST | 87 | 10 | 42 | 31.6 | <0.00001 |
| | Fellow | 413 | 47.4 | 45 | 33.8 | 0.00352 |
| | SAS | 80 | 9.2 | 1 | 0.8 | 0.000888 |
| | Other consultant | 4 | 0.5 | 0 | 0 | Not calculable |
| | Supervising consultant | 287 | 32.9 | 44 | 33.1 | 0.969 |
| Procedure | ALR | 12 | 1.1 | 1 | 0.6 | 0.5529 |
| | Blepharoplasty | 91 | 8.7 | 18 | 11.7 | 0.2845 |
| | Brow lift | 26 | 2.5 | 1 | 0.6 | 0.1385 |
| | Canthoplasty | 11 | 1.1 | 1 | 0.6 | 0.6143 |
| | Ectropion | 253 | 24.2 | 41 | 26.6 | 0.6685 |
| | Electrolysis | 5 | 0.5 | 1 | 0.6 | 0.8034 |
| | Entropion | 118 | 11.3 | 24 | 15.6 | 0.614 |
| | Excision/Biopsy | 217 | 20.8 | 26 | 16.9 | 0.1806 |
| | Lash resection | 7 | 0.7 | 0 | 0 | Not calculable |
| | Lid lowering | 17 | 1.6 | 1 | 0.6 | 0.332 |
| | Lid tightening | 15 | 1.4 | 1 | 0.6 | 0.406 |
| | Miscellaneous | 15 | 1.4 | 3 | 1.9 | 0.6645 |
| | Ptosis | 184 | 17.6 | 27 | 17.5 | 0.8328 |
| | Punctoplasty | 49 | 4.7 | 9 | 5.8 | 0.597 |
| | Retraction | 8 | 0.8 | 0 | 0 | Not calculable |
| | Tarsorrhaphy | 16 | 1.5 | 1 | 0.6 | 0.367 |
| | More than one procedure per eye | 104 | 11.9 | 18 | 13.5 | 0.597 |
| Infections | Eyes - number (%) | 14 | 1.6 | 3 | 2.25 | 0.5881 |
| | Patients - number (%) | 13 | 1.8 | 3 | 2.8 | 0.4885 |