

Online resources

Online resource Table 1 Oral antibiotic use prior to CDI diagnosis for all patients and those aged ≤65 and >65 years

| Antibiotic (mean dose per patient, mg) [†] | Institution | | | | | | | |
|---|-------------|-----------|-----------|------------|-------|-----------|-----------|------------|
| | Madrid | | | Barcelona* | | Rome | | Naples |
| | All | ≤65 years | >65 years | All | All | ≤65 years | >65 years | Paediatric |
| Amoxicillin-clavulanic acid | 2,063 | 807 | 2,589 | – | 1,889 | 1,981 | 1,819 | 105 |
| Azithromycin | 45 | | 65 | – | 762 | 1,152 | 469 | – |
| Cefaclor | – | | | – | – | – | – | 295 |
| Cefixime | – | | | – | 19 | 44 | – | – |
| Ciprofloxacin | 636 | | 903 | – | 730 | 759 | 708 | 1832 |
| Clarithromycin | – | | | – | 540 | 352 | 681 | 83 |
| Co-trimoxazole | 327 | | 465 | – | 284 | 378 | 213 | 31 |
| Erythromycin | – | | | – | 57 | 133 | – | – |
| Ethambutol | – | | | – | 6,663 | 14,176 | 1,028 | – |
| Fosfomycin | 307 | | 435 | 1,000 | – | – | – | – |
| Isoniazid | – | | | – | 1,180 | 2,420 | 250 | – |
| Levofloxacin | 205 | 423 | 113 | – | 1,428 | 2,028 | 840 | – |
| Linezolid | 57 | | 81 | 800 | 200 | 467 | – | – |
| Metronidazole | – | | | – | – | – | – | 132 |
| Moxifloxacin | – | | | – | 578 | 904 | 333 | – |
| Neomycin | – | | | 167 | – | – | – | – |
| Norfloxacin | – | | | – | 441 | 978 | 39 | – |
| Paromomycin | – | | | – | 83 | 194 | – | – |
| Pyrazinamid | – | | | – | 6,147 | 12,824 | 1,139 | – |
| Rifabutin | – | | | – | 17 | 39 | – | – |
| Rifampicin | – | | | – | 3,208 | 5,758 | 1,296 | – |
| Rifaximin | – | | | – | 2,616 | 4,430 | 1,256 | 711 |

*Not analysed by age due to low patient numbers. [†]Total cumulative dose divided by the number of infected patients.

Online resource Table 2 Parenteral antibiotic use prior to CDI diagnosis for all patients and those aged ≤65 and >65 years

| Antibiotic (mean dose per patient, mg)* | Institution | | | | | | | |
|---|-------------|-----------|-----------|------------|-------|-----------|-----------|------------|
| | Madrid | | | Barcelona* | | Rome | | Naples |
| | All | ≤65 years | >65 years | All | All | ≤65 years | >65 years | Paediatric |
| Amikacin | 261 | 769 | 48 | 467 | 222 | 352 | 125 | – |
| Amoxicillin-clavulanic acid | 1,500 | | 2,129 | 4,250 | 489 | – | 856 | – |
| Ampicillin-sulbactam | – | | | – | 2,488 | 4,667 | 854 | – |
| Cefamezin | – | | | – | 48 | – | 83 | – |
| Cefazolin | 568 | 1,615 | 129 | 167 | 190 | – | 333 | – |
| Cefonicid | – | | | 83 | – | – | – | – |
| Cefotaxime | 545 | | 774 | 833 | 1,524 | 2,963 | 444 | – |
| Ceftazidime | 1,250 | | 1,774 | 9,000 | 1,127 | 2,111 | 389 | – |
| Ceftriaxone | 659 | 1,000 | 516 | 1,500 | 4,889 | 4,407 | 5,250 | 4,105 |
| Cefuroxime | 51 | | 73 | – | – | – | – | – |
| Ciprofloxacin | 218 | 277 | 194 | 400 | 252 | 67 | 392 | – |
| Clarithromycin | – | | | – | 32 | 74 | – | – |
| Clindamycin | – | | | 200 | – | – | – | – |
| Cloxacillin | 364 | 1,231 | | – | – | – | – | – |
| Colistin | – | | | 240 | 56 | 130 | – | – |
| Co-trimoxazole | – | | | 3,200 | 429 | 1,000 | – | – |
| Daptomycin | – | | | 500 | – | – | – | – |
| Ertapenem | 602 | | 855 | 417 | – | – | – | – |
| Ethambutol | – | | | – | 581 | 1,022 | 250 | – |
| Gentamicin | – | | | 20 | 13 | 31 | – | – |
| Imipenem | 591 | 2,000 | | 48,750 | 1,417 | 1,741 | 1,174 | – |
| Isoniazid | – | | | – | 138 | 256 | 50 | – |
| Levofloxacin | 170 | 77 | 210 | 167 | 169 | 264 | 97 | – |
| Linezolid | 1,445 | 1,662 | 1,355 | 4,700 | 95 | 222 | – | – |
| Meropenem | 3,295 | 1,385 | 4,097 | 167 | 2,095 | 1,722 | 2,375 | – |
| Oxacillin | – | | | – | 1,333 | 3,111 | – | – |

| Antibiotic (mean dose per patient, mg)* | Institution | | | | | | | |
|---|-------------|-----------|-----------|------------|--------|-----------|-----------|------------|
| | Madrid | | | Barcelona* | | Rome | | Naples |
| | All | ≤65 years | >65 years | All | All | ≤65 years | >65 years | Paediatric |
| Piperacillin-tazobactam | 17,432 | 19,846 | 16,419 | 10,333 | 14,518 | 9,667 | 18,156 | – |
| Rifampicin | – | | | – | 276 | 511 | 100 | – |
| Streptomycin | – | | | – | 603 | 1,407 | – | – |
| Sulfamethoxazole-trimethoprim | 36 | | 51 | – | – | – | – | – |
| Teicoplanin | 18 | | 26 | – | 92 | 104 | 83 | – |
| Tigecycline | 107 | 15 | 145 | – | – | – | – | – |
| Vancomycin | 659 | 769 | 612 | 2,500 | 1,103 | 889 | 1,264 | 1,895 |

*Not analysed by age due to low patient numbers. †Total cumulative dose divided by the number of infected patients.

Online resource Table 3 Initial CDI, treatment and outcomes for patients with no recurrence

| | Institution | | | | | | | |
|--|-------------|------------|-------------|------------------------|-------------|-------------|-------------|------------|
| | Madrid | | | Barcelona ^a | | Rome | | Naples |
| | All | ≤65 years | >65 years | All | All | ≤65 years | >65 years | Paediatric |
| <i>n</i> | 87 | 31 | 56 | 10 | 101 | 48 | 53 | 17 |
| Mean duration of diarrhoea, days (range) | 9.2 (1–36) | 7.8 (2–32) | 10.0 (1–36) | 12.4 (2–25) | 12.2 (2–42) | 10.9 (2–26) | 13.3 (2–42) | 8.1 (0–30) |
| Diarrhoea contains blood (%) | 15.1 | 16.7 | 14.3 | 20.0 | 5.0 | 6.3 | 3.8 | 35.3 |
| Fever (%) | 11.6 | 13.3 | 10.7 | 10.0 | 17.8 | 22.2 | 15.3 | 17.7 |
| Ileus (%) | 3.5 | 3.3 | 3.6 | 10.0 | 1.0 | 1.9 | 2.8 | 0.0 |
| Leucocyte count ≥15 x 10 ⁹ /L (%) | 32.6 | 40.0 | 28.6 | 30.0 | 31.7 | 24.1 | 70.8 | 41.2 |
| Serum creatinine increase >50% (%) | 24.4 | 13.3 | 30.4 | 0.0 | 20.4 | 11.1 | 29.2 | 0.0 |
| Sigmoidoscopy/colonoscopy (%) | 5.8 | 6.7 | 5.4 | 0.0 | 5.9 | 5.6 | 8.3 | 17.7 |
| Pseudomembranes (%) | 4.7 | 6.7 | 3.6 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ulceration (%) | 2.3 | 3.3 | 1.8 | 0.0 | 3.0 | 2.1 | 3.8 | 3.8 |
| Colonic wall thickening (%) | 11.6 | 20.0 | 7.1 | 30.0 | 5.9 | 4.2 | 7.6 | 5.9 |
| Pericolonic fat (%) | 2.3 | 3.3 | 1.8 | 0.0 | 1.0 | 0.0 | 1.9 | 0.0 |
| Treatment, n (%) ^b | | | | | | | | |
| Metronidazole, oral | 74 (85.1) | 25 (80.6) | 49 (87.5) | 8 (80.0) | 66 (65.3) | 34 (70.8) | 32 (61.5) | 9 (52.3) |
| Metronidazole, intravenous | 21 (24.1) | 7 (22) | 14 (27.9) | 3 (30.0) | 15 (14.9) | 3 (6.3) | 12 (23.1) | 0 (0.0) |
| Vancomycin, oral | 13 (14.9) | 5 (16.1) | 8 (14.3) | 1 (10.0) | 30 (28.6) | 11 (22.9) | 19 (36.5) | 4 (23.5) |
| Vancomycin, intracolonic | 6 (6.9) | 3 (9.7) | 3 (5.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Outcomes (%) ^c | | | | | | | | |
| Cure | 75 (87.2) | 26 (86.7) | 49 (87.5) | 10 (100.0) | 79 (80.4) | 42 (91.3) | 37 (72.0) | 16 (94.1) |
| Failure | 8 (9.3) | 3 (10.0) | 5 (8.9) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (5.8) |
| 30-day mortality | 14 (16.3) | 5 (16.7) | 9 (16.0) | 1 (10.0) | 18 (18.6) | 4 (8.7) | 14 (27.5) | 0 (0.0) |

| | Institution | | | | | | | |
|-------------------------|-------------|-----------|-----------|------------------------|-----------|-----------|-----------|------------|
| | Madrid | | | Barcelona ^a | | Rome | | Paediatric |
| | All | ≤65 years | >65 years | All | All | ≤65 years | >65 years | |
| 1 year mortality | 19 (22.1) | 6 (20.0) | 13 (23.2) | 1 (10.0) | 19 (19.7) | 4 (8.7) | 15 (29.4) | 0 (0.0) |
| Attributable mortality | 4 (4.7) | 1 (3.3) | 3 (5.4) | 0 (0.0) | 7 (7.2) | 1 (2.2) | 6 (11.8) | 0 (0.0) |
| Recurrence ^d | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |

^aNot analysed by age due to low patient numbers, ^bPatients may have received more than one antibiotic, ^cOutcomes data not available for 1 and 4 patients in Madrid and Rome, respectively, ^dDefined as a second episode of CDI occurring within 2–8 weeks of the index case within hospital stay.

Online resource Table 4 Initial CDI, treatment and outcomes for patients with recurrence

| | Madrid ^a | Barcelona ^a | Rome ^a | Naples ^a |
|---|---------------------|------------------------|-------------------|---------------------|
| | All | All | All | Paediatric |
| <i>n</i> | 7 | 2 | 25 | 2 |
| Mean duration of diarrhoea, days (range) | 21.0 (7–48) | 8.5 (4–13) | 16.0 (4–50) | 5.5 (5–6) |
| Diarrhoea contains blood (%) | 14.3 | 0.0 | 12.0 | 50.0 |
| Fever (%) | 57.1 | 0.0 | 20.0 | 50.0 |
| Ileus (%) | 0.0 | 0.0 | 8.0 | 0.0 |
| Leucocyte count $\geq 15 \times 10^9/L$ (%) | 14.3 | 0.0 | 36.0 | 0.0 |
| Serum creatinine increase >50% (%) | 28.6 | 0.0 | 24.0 | 0.0 |
| Sigmoidoscopy/colonoscopy (%) | 28.6 | 50.0 | 12.0 | 0.0 |
| Pseudomembranes (%) | 57.1 | 0.0 | 0.0 | 0.0 |
| Ulceration (%) | 14.3 | 0.0 | 4.0 | 0.0 |
| Colonic wall thickening (%) | 42.9 | 50.0 | 12.0 | 0.0 |
| Pericolonic fat (%) | 28.6 | 0.0 | 0.0 | 0.0 |
| Treatment, n (%) ^b | | | | |
| Metronidazole, oral | 5 (71.4) | 2 (100.0) | 17 (65.9) | 1 (50.0) |
| Metronidazole, intravenous | 3 (42.9) | 0 (0.0) | 1 (12.7) | 0 (0.0) |
| Vancomycin, oral | 0 (0.0) | 0 (0.0) | 6 (28.6) | 1 (50.0) |
| Vancomycin, intracolonic | 1 (14.3) | 1 (50.0) | 0 (0.0) | 0 (0.0) |
| Outcomes (%) | | | | |
| Cure | 0 (0.0) | 2 (100.0) | 0 (0.0) | 1 (50.0) |
| Failure | 5 (71.4) | 0 (0.0) | 5 (20.0) | 0 (0.0) |
| 30-day mortality | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| 1 year mortality | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Attributable mortality | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Recurrence ^d | 7 (100.0) | 2 (100.0) | 25 (100.0) | 2 (100.0) |

^aNot analysed by age due to low patient numbers, ^bPatients may have received more than one antibiotic.