**Table 1. Clinical utility of viral testing**

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| --- | --- | --- | --- | --- | --- |
|  |  | **TOTAL (N = 219)** | | | |
|  |  | Antibiotic duration | | ATB stopped within 48h (%) | ATB stopped within 72h (%) |
|  | Total | Mean (SD) | Median (IQR) |
| NPA positive | 175 | 4.9 (3.5) | 3  (2 – 7) | 41 (23) | 87 (50) |
| NPA negative | 44 | 5.7 (4.1) | 4  (2 – 9) | 12 (27) | 20 (45) |
| p-value | - | 0.28 | 0.38 | 0.74 | 0.74 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **MCH (N = 76)** | | | | |  | |  | **CHUSJ (N = 111)** | | | |  | |  | | **CHEO (N = 32)** | | | |
|  | N | Antibiotic duration | | | ATB stopped within 48h (%) | ATB stopped within 72h (%) | | N | Antibiotic duration | | | ATB stopped within 48h (%) | ATB stopped within 72h (%) | | N | | Antibiotic duration | | | ATB stopped within 48h (%) | ATB stopped within 72h (%) |
|  | Mean (SD) | | Median (IQR) | Mean (SD) | | Median (IQR) | Mean (SD) | | Median (IQR) |
| NPA positive | 60 | | 4.3 (3.2) | 3  (2 – 6) | 20 (33) | 36 (60) | | 87 | 5.1 (3.6) | | 3  (3 – 8) | 17 (20) | 41 (47) | | 28 | | 5.7 (4.0) | | 5.5  (2.8 – 8) | 4 (14) | 10 (36) |
| NPA negative | 16 | 5.3 (4.6) | | 3.5  (2 – 7.5) | 7 (44) | 8 (50) | | 24 | 5.9 (3.9) | | 4.5  (3 – 10) | 4 (17) | 10 (42) | | 4 | | 5.8 (3.9) | | 5.5  (2.8 – 8.5) | 1 (25) | 2 (50) |
| p-value | - | 0.40 | | 0.63 | 0.63 | 0.66 | | - | 0.41 | | 0.43 | - | 0.81 | | - | | 0.97 | | 0.80 | - | - |

SD = standard deviation; IQR = interquartile range; ATB = antibiotics; NPA = nasopharyngeal aspirate; MCH = Montreal Children’s Hospital; CHUSJ = Centre Hospitalier Universitaire Sainte-Justine; CHEO = Children’s Hospital of Eastern Ontario

**Table 2. Clinical utility of viral testing stratified by type of viral infection**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **TOTAL (N = 219)** | | | |
|  | N (%) | Antibiotic duration | | ATB stopped within 48h (%) | ATB stopped within 72h (%) |
|  | Mean (SD) | Median (IQR) |
| **NPA positive** | **N = 175** | |  |  |  |
| Viral infection only | **111 (63)** | 4.4 (3.3) | 3 (2 – 6.5) | 29 (26) | 62 (55) |
| Clinical diagnosis of bacterial infection | **64 (37)** | 5.8 (3.8) | 5 (3 – 8) | 12 (19) | 25 (40) |
| **NPA negative** | **N = 44** | |  |  |  |
| Viral infection only | **31 (70)** | 5.0 (3.6) | 3  (2 – 8) | 9 (29) | 16 (52) |
| Clinical diagnosis of bacterial infection | **13 (30)** | 7.2 (4.8) | 7 (3 – 10) | 3 (23) | 4 (31) |
| p-value |  |  |  |  |  |
| Viral infection only | - | 0.40 | 0.45 | 0.93 | 0.83 |
| Clinical diagnosis of bacterial infection | - | 0.36 | 0.38 | 0.99 | 0.80 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **MCH (N = 76)** | | | |  | |  | **CHUSJ (N = 111)** | | | |  | |  | | **CHEO (N = 32)** | | | |
|  | N (%) | Antibiotic duration | | ATB stopped within 48h (%) | ATB stopped within 72h (%) | | N (%) | Antibiotic duration | | | ATB stopped within 48h (%) | ATB stopped within 72h (%) | | N (%) | | Antibiotic duration | | | ATB stopped within 48h (%) | ATB stopped within 72h (%) |
|  | Mean (SD) | Median (IQR) | Mean (SD) | | Median (IQR) | Mean (SD) | | Median (IQR) |
| **NPA positive** | **N = 60** | |  |  |  | | **N = 87** | | |  |  |  | | **N = 28** | | | |  |  |  |
| Viral infection only | **27 (45)** | 3.3 (2.4) | 3  (1.5–4) | 12 (43) | 19 (70) | | **72 (83)** | 4.9 (3.6) | | 3 (3 – 8) | 14 (19) | 37 (51) | | **12 (44)** | | 3.8 (2.7) | | 3 (2 – 5.8) | 3 (25) | 6 (50) |
| Clinical diagnosis of bacterial infection | **33 (55)** | 5.1 (3.5) | 3  (3–8) | 8 (24) | 17 (52) | | **15 (17)** | 6.1 (3.6) | | 6 (3.5–7.5) | 3 (20) | 4 (27) | | **16**  **(56)** | | 7.1 (4.3) | | 7 (3 – 8.5) | 1 (7) | 4 (27) |
| **NPA negative** | **N = 16** | |  |  |  | | **N = 24** | | |  |  |  | | **N = 4** | | | |  |  |  |
| Viral infection only | **11 (69)** | 4.7 (3.4) | 3  (2 – 7.5) | 5 (45) | 6 (54) | | **19 (79)** | 4.8 (3.2) | | 3 (3 – 6.5) | 3 (16) | 9 (47) | | **1 (25)** | | Duration = 2 days | | | 1 (100) | 1 (100) |
| Clinical diagnosis of bacterial infection | **5 (31)** | 6.6 (6.8) | 5 (2 – 7) | 2 (40) | 2 (40) | | **5 (21)** | 7.8 (4.1) | | 10 (5 – 11) | 1 (20) | 1 (20) | | **3 (75)** | | 7 (3.6) | | 8 (5.5 – 9) | 0 | 1 (33) |

SD = standard deviation; IQR = interquartile range; ATB = antibiotics; NPA = nasopharyngeal aspirate; MCH = Montreal Children’s Hospital; CHUSJ = Centre Hospitalier Universitaire Sainte-Justine; CHEO = Children’s Hospital of Eastern Ontario