|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **C:\Users\beason\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\24455E7F.tmp Pediatric and Neonatal Antibiotic Surgical Prophylaxis Guideline**  **1. The start of the infusion for all prophylactic antibiotics should be within 60 minutes prior to incision, except for vancomycin & ciprofloxacin which should be within 120 minutes.**  **2. The pre-op dose of antibiotic prophylaxis must be counted as part of the 24-hour duration. This results in <24 hours of post-op prophylaxis. For example, if cefazolin is given as pre-op prophylaxis x 1 dose and then prescribed as 1gm IV Q8h for post-op prophylaxis, the patient should receive no more than 2 post-op doses.**  **3. Many procedures are suitable to receive only a single pre-operative dose of antibiotic prophylaxis. Studies addressing duration of prophylaxis have failed to show any benefit of prophylaxis given after wound closure.**  **4. If ≥ 30 mL/kg (up to 50 kg) or 1.5L (patients ≥ 50 kg) of blood is lost intra-operatively, surgical prophylaxis antibiotics should be re-dosed.**  **5. Post-operative antibiotics (oral or IV) prescribed for an indication other than surgical prophylaxis must have adequate documentation of the indication in the medical record so it will not be interpreted as post-op prophylaxis upon review.**  **6. The Pediatric Antibiotic Surgical Prophylaxis guideline may not be an appropriate reference for patients weighing >60 kg or older than 16 years old. The Adult Antibiotic Surgical Prophylaxis guideline remains available if needed.** | | | | | | |
| **Procedure** | **Preferred Regimen** | **Severe Beta-Lactam Allergy** | **MRSA Colonization** | | **Intraoperative Re-dosing**  *(until wound closure)\** | **Post-operative Re-dosing** |
| **Without severe Beta-lactam allergy** | **Severe Beta-lactam allergy** |
| **Cardiac**  (CT surgery/procedure excluding cardiac cathererization**)** | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  900 mg if ≥60 kg  OR  **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 48 hours including pre-op dose |
| **Thoracic** | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  900 mg if ≥60 kg  OR  **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 48 hours including pre-op dose |
| **Neurosurgery**  (Elective craniotomy, intrathecal baclofen shunt or ventricular shunt placement) | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  OR  **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **Cefazolin** 50 mg/kg if < 40 kg  2g if 40-120kg; 3g if ≥120 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Skull base surgery* | Cefepime  50 mg/kg if < 40 kg  2g if ≥40 kg  Metronidazole  15 mg/kg if < 67 kg  1000 mg if ≥67 kg  +  Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg;  1.5g if ≥120kg | Gentamicin  2.5 mg/kg  +  Metronidazole  15 mg/kg if < 67 kg  1000 mg if ≥67 kg  +  Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefepime  50 mg/kg if < 40 kg  2g if ≥40 kg +  Metronidazole  15 mg/kg if < 67 kg  1000 mg if ≥67 kg  +  Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Gentamicin  2.5 mg/kg  +  Metronidazole  15 mg/kg if < 67 kg  1000 mg if ≥67 kg  +  Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Metronidazole = n/a  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Procedure** | **Preferred Regimen** | **Severe Beta-Lactam Allergy** | **MRSA Colonization** | | **Intraoperative Re-dosing**  *(until wound closure)\** | **Post-operative Re-dosing** |
| **Without severe Beta-lactam allergy** | **Severe Beta-lactam allergy** |
| **Orthopedic**  (Clean operations involving hand, knee, and not involving implantation of foreign materials) | None | None | None | None | n/a | n/a |
| **Orthopedic**  (internal fixation of fractures, hip repairs, implantation of materials including prosthetic joint and spinal procedures with and without instrumentation) | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  OR  **Vancomycin (for hip procedures)**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Head and Neck**  (Clean, without entry into aerodigestive tract) | None | None | None | None | n/a | n/a |
| **Head and Neck**  [Clean w/ placement of prosthesis (excludes typanostomy tubes), incision through oral oropharyngeal mucosa] | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Gentamicin**  2.5 mg/kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Head and Neck**  (Clean, contaminated , with entry into aerodigestive tract, major intraoral surgery) | Ampicillin-sulbactam  50 mg/kg if < 67 kg  2g if 67-120kg;  Dose based on ampicillin component | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Gentamicin**  2.5 mg/kg | Ampicillin-sulbactam = 2 hr  Clindamycin = 6 hr | Should not exceed 24 hours including pre-op dose |
| *Percutaneous procedure* | None | None | None | None | n/a | n/a |
| *Lymph Node Dissection* | None | None | None | None | n/a | n/a |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Procedure** | **Preferred Regimen** | **Severe Beta-Lactam Allergy** | **MRSA Colonization** | | **Intraoperative Re-dosing**  *(until wound closure)\** | **Post-operative Re-dosing** |
| **Without severe Beta-lactam allergy** | **Severe Beta-lactam allergy** |
| *Soft tissue/bone procedure (no mucosal involvement)* | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Gastrointestinal**  Esophageal and Gastroduodenal | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  **+**  **Gentamicin**  2.5 mg/kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Gentamicin**  2.5 mg/kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Appendectomy (uncomplicated, nonperforated)* | **Cefoxitin**  40 mg/kg if < 50 kg  2g if ≥50 kg  OR  **Ceftriaxone +**  50 mg/kg if < 40 kg  2g if ≥40 kg  **Metronidazole**  15 mg/kg if < 67 kg  1000 mg if ≥67 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  **Gentamicin**  2.5 mg/kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  **+**  **Cefoxitin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Gentamicin**  2.5 mg/kg | Cefoxitin = 2 hr  Ceftriaxone = n/a  Clindamycin = 6 hr  Gentamicin = 8 hr  Metronidazole = n/a | Should not exceed 24 hours including pre-op dose |
| *EGD with/without biopsy* | None | None | None | None | n/a | n/a |
| **Liver & biliary tract** (Open and elective, high-risk laproscopic) | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  **+**  **Gentamicin**  2.5 mg/kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  **+**  **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Gentamicin**  2.5 mg/kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Liver & biliary tract**  (Elective, low-risk laproscopic) | None | None | None | None | n/a | n/a |
| *Liver biopsy* | None | None | None | None | n/a | n/a |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Procedure** | **Preferred Regimen** | **Severe Beta-Lactam Allergy** | **MRSA Colonization** | | **Intraoperative Re-dosing**  *(until wound closure)\** | **Post-operative Re-dosing** |
| **Without severe Beta-lactam allergy** | **Severe Beta-lactam allergy** |
| *Splenectomy* | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg | Vancomycin  (15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Small Bowel**  **(Nonobstructed)** | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  **+**  **Gentamicin**  2.5 mg/kg | Vancomycin  (15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Small Bowel**  **(Obstructed)** | **Cefoxitin**  40 mg/kg if < 50 kg  2g if ≥50 kg  OR  **Cefazolin +**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg **Metronidazole**  15 mg/kg if < 67 kg  1000 mg if ≥67 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Cefoxitin  40 mg/kg if < 50 kg  2g if ≥50 kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg +  Gentamicin  2.5 mg/kg | Cefoxitin = 2 hr  Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Metronidazole = n/a  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Colorectal or appendectomy** (uncomplicated, nonperforated**)** | **Cefoxitin**  40 mg/kg if < 50 kg  2g if ≥50 kg  OR  **Cefazolin +**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg **Metronidazole**  15 mg/kg if < 67 kg  1000 mg if ≥67 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  **+**  **Gentamicin**  2.5 mg/kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  **+**  **Cefoxitin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Gentamicin**  2.5 mg/kg | Cefoxitin = 2 hr  Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Metronidazole = n/a  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Colonoscopy involving biopsy* | None | None | None | None | n/a | n/a |
| *Penetrating abdominal trauma* | Cefoxitin  40 mg/kg if < 50 kg  2g if ≥50 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Cefoxitin  40 mg/kg if < 50 kg  2g if ≥50 kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg +  Gentamicin  2.5 mg/kg | Cefoxitin = 2 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Procedure** | **Preferred Regimen** | **Severe Beta-Lactam Allergy** | **MRSA Colonization** | | **Intraoperative Re-dosing**  *(until wound closure)\** | **Post-operative Re-dosing** |
| **Without severe Beta-lactam allergy** | **Severe Beta-lactam allergy** |
| *Ruptured viscus (regarded as treatment, not prophylaxis),*  *Exploratory laparotomy* | Cefoxitin  40 mg/kg if < 50 kg  2g if ≥50 kg +  Gentamicin  2.5 mg/kg  OR  **Ceftriaxone +**  50 mg/kg if < 40 kg  2g if ≥40 kg  **Metronidazole**  15 mg/kg if < 67 kg  1000 mg if ≥67 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Cefoxitin  40 mg/kg if < 50 kg  2g if ≥50 kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg +  Gentamicin  2.5 mg/kg | Cefoxitin = 2 hr  Ceftriaxone = n/a  Clindamycin = 6 hr  Gentamicin = 8 hr  Metronidazole = n/a  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Reproductive Tract – Female** | **Cefoxitin**  40 mg/kg if < 50 kg  2g if ≥50 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  **+**  **Gentamicin**  2.5 mg/kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  **+**  **Cefoxitin**  40 mg/kg if < 50 kg  2g if ≥50 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg **+**  **Gentamicin**  2.5 mg/kg | Cefoxitin = 2 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Urologic Tract** |  |  |  |  |  |  |
| *Clean procedure without entry into urinary tract: open or laparoscopic (orchiopexy, circumcision)* | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Clean procedure with entry into urinary tract: open or laparoscopic (hypospadias repair, partial nephrectomy, ureteral re-implant, pyeloplasty)* | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Gentamicin  2.5 mg/kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Elective, urethral instrumentation, pre-op culture positive* | Based on culture | Based on culture | Based on culture | Based on culture | Based on culture | Should not exceed 24 hours including pre-op dose |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Procedure** | **Preferred Regimen** | **Severe Beta-Lactam Allergy** | **MRSA Colonization** | | **Intraoperative Re-dosing**  *(until wound closure)\** | **Post-operative Re-dosing** |
| **Without severe Beta-lactam allergy** | **Severe Beta-lactam allergy** |
| *Emergent, urethral instrumentation* | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  Gentamicin  2.5 mg/kg | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Gentamicin  2.5 mg/kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr | Should not exceed 24 hours including pre-op dose |
| *Procedure involving implanted prosthesis (e.g. testicular prosthesis* | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg  +  Gentamicin  2.5 mg/kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Gentamicin  2.5 mg/kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Procedure involving entry into intestine: open or laparoscopic (MACE,Monti, Augmentation cystoplasty, Illeal Conduit)* | Cefoxitin  40 mg/kg if < 50 kg  2g if ≥50 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Gentamicin  2.5 mg/kg | Cefoxitin = 2 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Clean-contaminated Urologic/cutaneous fistula repair* | Cefoxitin  40 mg/kg if < 50 kg  2g if ≥50 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Gentamicin  2.5 mg/kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  Gentamicin  2.5 mg/kg | Cefoxitin = 2 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Indwelling bladder catheter insertion/removal* | None | None | None | None | n/a | n/a |

\* Recommended re-dose times are based on pediatric patients with normal renal function. For pediatric patients with reduced renal function, please contact pharmacy for re-dose guidance

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Procedure** | **Preferred Regimen** | **Severe Beta-Lactam Allergy** | **MRSA Colonization** | | **Intraoperative Re-dosing**  *(until wound closure)\** | **Post-operative Re-dosing** |
| **Without severe Beta-lactam allergy** | **Severe Beta-lactam allergy** |
| **Kidney +/- Pancreas** | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg  +  Fluconazole (if high risk of fungal infection) | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg  +  **Gentamicin**  2.5 mg/kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  **Gentamicin**  2.5 mg/kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg  +  **Gentamicin**  2.5 mg/kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Gentamicin = 8 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| **Skin and Soft Tissue** | **Cefazolin**  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | **Clindamycin**  10 mg/kg if <60 kg  600 mg if ≥60 kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | **Vancomycin**  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Hernia repair (ventral, inguinal)* | None | None | None | None | n/a | n/a |
| *Hernia repair w/ mesh placement* | Cefazolin  30 mg/kg if < 67 kg  2g if 67-120kg; 3g if ≥120 kg | Clindamycin  10 mg/kg if <60 kg  600 mg if ≥60 kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Vancomycin  15 mg/kg if <67 kg  1g if 67-120kg; 1.5g if ≥120kg | Cefazolin = 4 hr  Clindamycin = 6 hr  Vancomycin = n/a | Should not exceed 24 hours including pre-op dose |
| *Biopsy (lymph node, muscle, bone marrow)* | None | None | None | None | n/a | n/a |
| *Central venous catheter insertion* | None | None | None | None | n/a | n/a |
| *I&D of abscess* | None | None | None | None | n/a | n/a |

|  |  |  |
| --- | --- | --- |
| **NEONATAL ANTIBIOTIC PROPHYALXIS FOR SURGICAL PROCEDURES**  Check patient medication profile for previous adminisrations of antibiotics prior to administering pre-op dose | | |
|  | **Likely Pathogens/Type of Procedure** | **Recommended Antibiotic** |

|  |  |  |
| --- | --- | --- |
| **NEONATAL ANTIBIOTIC PROPHYALXIS FOR SURGICAL PROCEDURES**  Check patient medication profile for previous adminisrations of antibiotics prior to administering pre-op dose | | |
|  | **Likely Pathogens/Type of Procedure** | **Recommended Antibiotic** |
| **Neonatal (<72 hours of age) – all major procedures** | **Group B Streptococcus, enteric gram negative bacilli, enterococci, coagulase negative staphylococci** | **Ampicillin 50 mg/kg**  **PLUS**  **Gentamicin 4 mg/kg** |
| **Neonatal (>72 hours of age) – all major procedures** | **Prophylaxis targeted to operative site, nosocomial or colonizing organisms** | **Esophageal/gastroduodenal/jejunal:**  **Cefazolin**  **Gastroschisis abdominal closure:**  **Cefazolin**  **Ileal/colorectal:**  **Ampicillin/gentamicin/metronidazole**  **NEC:**  **Ampicillin/gentamicin/metronidazole** |

|  |  |  |
| --- | --- | --- |
| **NEONATAL ANTIBIOTIC PROPHYALXIS FOR SURGICAL PROCEDURES**  Check patient medication profile for previous adminisrations of antibiotics prior to administering pre-op dose | | |
|  | **Likely Pathogens/Type of Procedure** | **Recommended Antibiotic** |
| **Neonatal (<72 hours of age) – all major procedures** | **Group B Streptococcus, enteric gram negative bacilli, enterococci, coagulase negative staphylococci** | **Ampicillin 50 mg/kg**  **PLUS**  **Gentamicin 4 mg/kg** |
| **Neonatal (>72 hours of age) – all major procedures** | **Prophylaxis targeted to operative site, nosocomial or colonizing organisms** | **Esophageal/gastroduodenal/jejunal:**  **Cefazolin**  **Gastroschisis abdominal closure:**  **Cefazolin**  **Ileal/colorectal:**  **Ampicillin/gentamicin/metronidazole**  **NEC:**  **Ampicillin/gentamicin/metronidazole** |

|  |  |  |
| --- | --- | --- |
| **NEONATAL ANTIBIOTIC PROPHYALXIS FOR SURGICAL PROCEDURES**  Check patient medication profile for previous adminisrations of antibiotics prior to administering pre-op dose | | |
|  | **Likely Pathogens/Type of Procedure** | **Recommended Antibiotic** |
| **Neonatal (<72 hours of age) – all major procedures** | **Group B Streptococcus, enteric gram negative bacilli, enterococci, coagulase negative staphylococci** | **Ampicillin 50 mg/kg**  **PLUS**  **Gentamicin 4 mg/kg** |
| **Neonatal (>72 hours of age) – all major procedures** | **Prophylaxis targeted to operative site, nosocomial or colonizing organisms** | **Esophageal/gastroduodenal/jejunal:**  **Cefazolin**  **Gastroschisis abdominal closure:**  **Cefazolin**  **Ileal/colorectal:**  **Ampicillin/gentamicin/metronidazole**  **NEC:**  **Ampicillin/gentamicin/metronidazole** |

|  |  |  |
| --- | --- | --- |
| **NEONATAL DOSING SCHEDULE FOR PRE-OPERATIVE ANTIBIOTICS** | | |
| **Antimicrobial Agent** | **Neonatal Dose** | **Re-dosing Schedule** |
| **Ampicillin** | **50 mg/kg** | **12 hr or**  **8 h if > 3kg**  **And > 7d** |
| **Cefazolin** | **25 mg/kg** | **12 hr or**  **8 h if > 3kg**  **And > 7d** |
| **Clindamycin** | **7.5 mg/kg** | **12hr or**  **8 hr if >3kg**  **and > 7 d** |
| **Gentamicin** | **<29 wk GA: 5 mg/kg**  **>30 wks GA: 4 mg/kg** | **NA** |
| **Metronidazole** | **<1.2 kg: 7.5 mg/kg**  **>1.2 kg: 15 mg/kg** | **NA** |
| **Piperacillin/tazobactam\*** | **PNA<7d: 100 mg/kg**  **PNA 8-28 d: 80 mg/kg** | **12 hr or**  **8 hr if > 3kg**  **and > 7d** |
| **Vancomycin** | **10 mg/kg** | **12 hr** |
| **Fluconazole** | **6 mg/kg** | **NA** |

\*piperacillin/tazobactam dosing is based on piperacillin component

References

American Academy of Pediatrics. Antimicrobial prophylaxis in Pediatric Surgical Patients. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. Red Book: 2018 Report of the Committee on Infectious Diseases. 31st ed. Itasca, IL: American Academy of Pediatrics; 2018: 1031-1043.

Bratzler, DW, Dellinger EP, Olsen KM, et al. American Society of Health-System Pharmacists; Infectious Disease Society of America; Surgical Infection Society; Society for Healthcare Epidemiology of America. Clinical practice guidelines for antimicrobial prophylaxis in surgery. Am J Health Syst Pharm. 2013;70(3): 195-283.