Do not prescribe IV antibiotics for predetermined durations for patients hospitalized with infections such as pyelonephritis, osteomyelitis and complicated pneumonia. Consider early transition to oral antibiotics.

Recent publications have demonstrated that strategies for early transition to oral antibiotics achieve equal or better outcomes for common inpatient infections and are safer than prolonged intravenous antibiotics in children. The use of intravenous lines such as peripherally inserted central catheters, which are often necessary for prolonged intravenous antibiotics, can lead to complications such as thrombosis or line infections. Antibiotic courses with predetermined durations are often not based on high-quality evidence and ignore individual response to treatments, which can vary significantly from patient to patient. Once a patient is able to tolerate them, early transition to oral antibiotics, based on individual patient clinical responses such as defervescence and other symptoms and signs of improvement, are patient and family centered and can improve the value of care for hospitalized children.

Do not continue hospitalization in well-appearing febrile infants once bacterial cultures (i.e. blood, cerebrospinal, and/or urine) have been confirmed negative for 24–36 hours, if adequate outpatient follow-up can be assured.

Routinely continuing hospitalization beyond 24–36 hours of confirmed negative bacterial cultures for well-appearing infants admitted for concern of serious bacterial infection does not improve clinical outcomes. Blood culture yield is highest in the first 12–36 hours after incubation with multiple studies demonstrating >90% of pathogen cultures being positive by 24 hours. If adequate outpatient follow-up can be assured, discharging well-appearing febrile infants at 24–36 hours if cultures are confirmed to be negative will decrease length of stay, antibiotic exposure, and iatrogenic complications.

Do not initiate phototherapy in term or late preterm well-appearing infants with neonatal hyperbilirubinemia if their bilirubin is below levels at which the AAP guidelines recommend treatment

The risk of poor neurologic outcomes, such as cerebral palsy due to kernicterus, is extremely low for term and late preterm newborns with modestly elevated bilirubin levels. Confirmed cases of kernicterus have average bilirubin levels near 40 mg/dL, and are typically associated with hemolysis. While phototherapy for bilirubin values above published thresholds may be useful to prevent severe hyperbilirubinemia and exchange transfusions, its use for bilirubin values below published thresholds is unnecessary and is associated with additional costs and unnecessary hospitalization.

Do not use broad-spectrum antibiotics such as ceftriaxone for children hospitalized with uncomplicated community-acquired pneumonia. Use narrow-spectrum antibiotics such as penicillin, ampicillin or amoxicillin.

Using broad-spectrum antibiotic therapy does not improve rates of treatment failure, length of stay, or decrease costs when compared with narrow-spectrum antibiotic therapy for children hospitalized with community-acquired pneumonia (CAP). The use of narrow-spectrum antibiotics for children hospitalized with CAP can limit the development of multi-drug resistant organisms, while achieving similar or better outcomes.

Do not start IV antibiotic therapy on well-appearing newborn infants with isolated risk factors for sepsis such as maternal chorioamnionitis, prolonged rupture of membranes, or untreated group-B streptococcal colonization. Use clinical tools such as an evidence-based sepsis risk calculator to guide management.

Unnecessary exposure of infants to antibiotics is associated with increased parental anxiety, length of stay, increased cost, gut microbiome dysbiosis, necrotizing enterocolitis and possibly allergic and autoimmune diseases. Antibiotic therapy often leads to transfers to higher levels of care and thus decreased maternal-infant bonding. The use of evidence-based sepsis calculators has demonstrated reductions in antibiotic use of 50% or more without a concomitant increase in the incidence of early onset sepsis.

These items are provided solely for informational purposes and are not intended as a substitute for consultation with a medical professional. Patients with any specific questions about the items on this list or their individual situation should consult their physician.
How This List Was Created

A diverse committee with representatives from the Society of Hospital Medicine's Pediatrics Special Interest Group, the American Academy of Pediatrics' Section on Hospital Medicine and the Academic Pediatric Association's Hospital Medicine Special Interest Group solicited a list of recommendations with specified criteria from colleagues and the various society listserves. Through an iterative process, recommendations were formatted, merged, and presented with an evidence review of publications from the past 10 years supporting each recommendation. From over 100 initial recommendations and through 2 rounds of a modified Delphi process, the highest scoring recommendations were chosen to represent the Pediatric Hospital Medicine Choosing Wisely list. The list was endorsed by the Boards of the Society of Hospital Medicine and the Academic Pediatric Association and peer reviewed by various AAP specialty groups and endorsed by the American Academy of Pediatrics' Executive Committee.

The guidance in this list does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

Sources


For more information or to see other lists of Five Things Physicians and Patients Should Question, visit www.choosingwisely.org.