

admitted to hospital with ascites and fever or clinical deterioration in a small report from Brazil and in 28% of children in a case series from India.^(267,268) Following their initial admission with SBP, children had a higher risk of death or LT than those without SBP.⁽²⁶⁹⁾ If bacteria grew when the ascites fluid samples from these children were cultured, the majority were gram-negative organisms. Broad-spectrum antibiotic coverage against both gram-positive and negative organisms should be commenced in children with ascites PMN count $>250/\text{mm}^3$, or children with suspected SBP in whom diagnostic paracentesis cannot be achieved. The role of prophylactic antibiotics to prevent SBP in children has not been studied.

The prevalence of AKI in children with cirrhosis is not known, and there is no agreed-on definition of AKI in this population. There are very few reports of pediatric HRS in the literature, and this condition is not commonly encountered in children.^(270,271) HRS was identified in 6% of children waiting for LT in one center.⁽²⁷⁰⁾ Data on pharmacologic therapy with vasoconstrictors such as terlipressin are emerging but still very limited in pediatric population.^(270,272)

Guidance Statements

- Diagnosis of ascites and its cause in children requires a comprehensive evaluation of clinical history, examination, and diagnostic testing, including abdominal ultrasound.
- Children with cirrhosis and ascites should be referred for evaluation for LT.
- Ascites in children is initially managed with restricted sodium intake to below 2 mmol/kg per day and administration of spironolactone (1–4 mg/kg per day) and furosemide (1–3 mg/kg per day in divided doses).
- Symptomatic children with grade 3 and treatment RA should usually undergo therapeutic paracentesis, although the indications, risks, and benefits of this procedure in children have not been fully defined.
- Children undergoing LVP should receive 25% albumin infusion of 0.5–1.0 g/kg, or 6–8 g per liter of ascites removed.
- Diagnostic paracentesis should be performed in children with ascites and fever, abdominal pain, or clinical deterioration. The risks and benefits of this procedure for use in all children with new

ascites but without these symptoms have not been defined.

- Children with proven or suspected SBP should be treated with broad-spectrum antibiotic cover against both gram-positive and gram-negative organisms.
- No recommendation can be given for the management of AKI and HRS in children with cirrhosis because of the absence of relevant definitions and lack of data on treatment and outcomes.

FUTURE DIRECTIONS

Key areas of uncertainty and for future direction are included in Table 14.

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