

or elective endotracheal intubation. In cases with shock, aggressive fluid resuscitation (with replacement of the circulating volume several times in severe cases) and inotropic support may be necessary to maintain cardiac output. If shock persists after volume resuscitation at 40 mL/kg, the risk of pulmonary edema is high, and elective intubation is recommended to improve oxygenation and decrease the work of breathing. Metabolic derangements, including hypoglycemia, acidosis, hypokalemia, hypocalcemia, hypomagnesemia, hypophosphatemia, anemia, and coagulopathy, should be anticipated and corrected. However, aggressive fluid resuscitation with unbuffered electrolyte solutions was found to increase mortality in febrile African children. Studies of the effects of lower volumes of buffered solutions and similar studies in resource-rich settings are required. In the presence of raised intracranial pressure, management includes correction of coexistent shock and neurointensive care to maintain cerebral perfusion.

Empirical antibiotic therapy for suspected meningococcal disease consists of a third-generation cephalosporin such as ceftriaxone (75–100 mg/kg per day [maximum, 4 g/d] in one or two divided IV doses) or cefotaxime (200 mg/kg per day [maximum, 8 g/d] in four divided IV doses) to cover the various other (potentially penicillin-resistant) bacteria that may produce an indistinguishable clinical syndrome. Although unusual in most isolates, reduced meningococcal sensitivity to penicillin (a minimal inhibitory concentration of 0.12–1.0 µg/mL) has been reported.

Both meningococcal meningitis and meningococcal septicemia are conventionally treated for 7 days, although courses of 3–5 days may be equally effective. Furthermore, a single dose of ceftriaxone or an oily suspension of chloramphenicol has been used successfully in resource-poor settings. No data are available to guide the duration of treatment for meningococcal infection at other foci (e.g., pneumonia, arthritis); antimicrobial therapy is usually continued until clinical and laboratory evidence of infection has resolved. Cultures usually become sterile within 24 h of initiation of appropriate antibiotic chemotherapy.

The use of glucocorticoids for adjunctive treatment of meningococcal meningitis remains controversial since no relevant