The patient with meningitis generally has an elevated white blood cell count, often predominantly polymorphonuclear leukocytes. Typically, in bacterial meningitis, the CSF glucose level is reduced, generally in proportion to the duration and severity of the infection. The protein concentration is usually increased.

A blood culture is advisable for all children suspected of having meningitis and occasionally will be positive when CSF culture is negative. Nose and throat cultures may provide helpful information in some cases.

## Therapeutic Management

Acute bacterial meningitis is a medical emergency that requires early recognition and immediate therapy to prevent death and avoid residual disabilities. The initial therapeutic management includes:

- Isolation precautions
- Initiation of antimicrobial therapy
- Maintenance of hydration
- Maintenance of ventilation
- Reduction of increased ICP
- Management of systemic shock
- Control of seizures
- Control of temperature
- Treatment of complications

The child is isolated from other children, usually in an intensive care unit for close observation. An IV infusion is started to facilitate administration of antimicrobial agents, fluids, antiepileptic drugs, and blood, if needed. The child is placed in respiratory isolation.

## **Drugs**

Until the causative organism is identified, empirical therapy is administered. After identification of the organism, antimicrobial agents are adjusted accordingly.

## Drug Alert

Dexamethasone may play a role in the initial management of