

important to observe the infant's behavior in conjunction with the stimulus, because limb movements can be induced in response to spinal cord reflex activity that has no connection with the higher centers. Observation of urinary output, especially if a diaper remains dry, may indicate urinary retention. Abdominal assessment revealing bladder distention, even with a wet diaper, may indicate urinary overflow in a retentive bladder. The head circumference is measured daily (see [Chapter 7](#)), and the fontanelles are examined for signs of tension or bulging.

Care of the Myelomeningocele Sac

The infant is usually placed in an incubator or warmer so temperature can be maintained without clothing or covers that might irritate the spinal lesion. When an overhead warmer is used, the dressings over the defect require more frequent moistening because of the dehydrating effect of the radiant heat.

Before surgical closure, the myelomeningocele is prevented from drying by the application of a sterile, moist, nonadherent dressing. The moistening solution is usually sterile normal saline. Dressings are changed frequently (every 2 to 4 hours), and the sac is closely inspected for leaks, abrasions, irritation, and any signs of infection. The sac must be carefully cleansed if it becomes soiled or contaminated. Sometimes the sac ruptures during delivery or transport, and any opening in the sac greatly increases the risk of infection to the CNS.

Nursing Alert

Observe for early signs of infection, such as temperature instability (axillary), irritability, and lethargy, and for signs of increased intracranial pressure, which might indicate developing hydrocephalus.

Nursing Alert

Avoid measuring rectal temperatures in infants with spina bifida (SB). Because bowel sphincter function is frequently affected, the thermometer can cause irritation and rectal prolapse.

One of the most important and challenging aspects in the early