line of the lower leg and one perpendicular to the leg, are produced. This combination of pulls allows realignment of the lower extremity and immobilizes the hip and knee in a flexed position. The hip flexion must be kept at the prescribed angle to prevent fracture malalignment because there is no direct support under the fracture and the skin traction may slip. Special nursing measures include carefully checking the position of the traction so that the amount of desired hip flexion is maintained and damage to the common peroneal nerve under the knee does not produce footdrop.

A common skeletal traction is **90-degree–90-degree traction** (90-90 traction). The lower leg is supported by a boot cast or a calf sling, and a skeletal Steinmann pin or Kirschner wire is placed in the distal fragment of the femur, resulting in a 90-degree angle at both the hip and the knee. From a nursing standpoint, this traction facilitates position changes, toileting, and prevention of complications related to traction.

Balanced suspension traction may be used with or without skin or skeletal traction. Unless used with another traction, the balanced suspension merely suspends the leg in a desired flexed position to relax the hip and hamstring muscles and does not exert any traction directly on a body part. A **Thomas splint** extends from the groin to midair above the foot, and a **Pearson attachment** supports the lower leg. Towels or pieces of felt covered with stockinette are clipped or pinned to the splints for leg support. When the child is lifted off the bed, the traction lifts with the child without loss of alignment. This traction requires careful checking of splints and ropes to make certain that no slippage or fraying has occurred. The traction is of great value in an older and heavier child when it is essential to lift the patient for care.

The cervical area is a vulnerable site for flexion or extension injuries to muscle, vertebrae, or the spinal cord. Cervical muscle trauma without other complications is treated with a cervical hard collar to relieve the weight of the head from the fracture site. When a child displaces or fractures a cervical vertebra, it may be necessary to reduce and immobilize the site with cervical skeletal traction. The spinal cord runs through the intravertebral canal, and dislocation or fracture of the vertebrae can also cause spinal cord injury. Nursing assessment of neurologic function is essential to prevent further injury during the application and use of cervical skeletal traction.