The use of upper extremity traction in children is uncommon. Newer surgical techniques allow for early mobilization and optimal results without traction. Nursing care of the child with upper extremity traction is the same as that for lower extremity traction, which is discussed later.

The frequent site for a femoral fracture is in the middle third of the shaft. With this fracture, there may be significant overriding but minimal displacement. In a fracture in the lower third of the shaft, the pull of the gastrocnemius muscle causes the distal fragment to become downwardly displaced.

Fractures of the femur can often be reduced with immediate application of a hip spica cast in young children. When traction is required, several types may be used based on the initial assessment.

**Bryant traction** is a type of running traction in which the pull is in only one direction. Skin traction is applied to the legs, which are flexed at a 90-degree angle at the hips. The child's trunk (with the buttocks raised slightly off the bed) provides counter traction.

**Buck extension traction** (Fig. 29-10) is a type of traction with the legs in an extended position. Except for fracture cases, turning from side to side with care is permitted to maintain the involved leg in alignment. Buck extension traction is used primarily for short-term immobilization, such as preoperative management of a child with a dislocated hip, or for correction of contractures or bone deformities, such as in Legg-Calvé-Perthes disease. Buck traction may be accomplished with either skin straps or a special foam boot designed for traction.

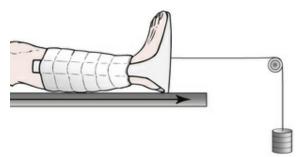


FIG 29-10 Buck extension traction.

**Russell traction** uses skin traction on the lower leg and a padded sling under the knee. Two lines of pull, one along the longitudinal