The following should be included in teaching the client and family about care at home.

- Self-care activities (ADLs, exercises, bowel and bladder programs, skin care)
- Mobility (use of assistive devices: wheelchair, crutches, special automobiles)
- Preparation of the home environment
  - If the client is in a wheelchair, will steps, stairs, doors, or carpeted floors present physical barriers?
  - If a special bed is necessary, have arrangements been made, and is it in the home?
- Psychologic support
- Independent activities

- Community resources, such as Life-line (emergency alerting systems through a local hospital or agency), support groups, career centers for job retraining, counseling
- Coping skills for client and caregiver
- Referral to a home health agency and physical therapist for the client who is returning home
- Helpful resources:
  - The National Spinal Cord Injury Association
  - American Paralysis Association
  - Christopher Reeve Paralysis Foundation
  - Paralyzed Veterans of America
  - Canadian Paraplegic Association
  - Australian Quadriplegic Association

Jim Valdez, a 19-year-old college sophomore, is admitted to the hospital by ambulance following an automobile accident. His family (father, mother, and sister) live 100 miles away and cannot visit often, although they are very concerned. On admission to the hospital, a CT scan of the spine shows a fracture and partial laceration of the cord at the C7 level. Mr. Valdez is in halo traction. One night, he tells the nurse, “I wish I had just died when I got hurt. I don’t think I can stand to live like this.”

**ASSESSMENT**

When Mr. Valdez is admitted to the intensive care unit, he has flaccid paralysis involving all extremities. He has no sensation below the clavicle or in portions of his arms and legs. His bladder is distended and bowel sounds are absent. Other assessment findings include BP 90/56, P 50, T 97°F (36.1°C), arterial blood gases Ph 7.4, PaO₂ 96, PaCO₂ 37, SaO₂ 96%. Oxygen per nasal cannula is given at 2 L/min, and halo traction is applied. A Foley catheter is inserted into his bladder, and a nasogastric tube is inserted into his stomach and attached to low-pressure continuous suction.

After 7 days, Mr. Valdez is moved from the intensive care unit to the neurosurgical unit for continuing care and planning for transfer to a rehabilitation hospital in his home town. His vital signs have stabilized and are normal for his age; respirations and oxygenation are normal. Other neurologic assessments remain the same.
A herniated intervertebral disk, also called a ruptured disk, herniated nucleus pulposus, or a slipped disk, is a rupture of the cartilage surrounding the intervertebral disk with protrusion of the nucleus pulposus (Figure 41–8 ■). Perhaps few neuro-orthopedic disorders are as challenging as those involving the intervertebral disks. Clients with herniation (rupture) of a disk have not only excruciating pain but also limited mobility. These problems may in turn cause alterations in role function, coping, and the ability to perform activities of daily living.

INCIDENCE AND PREVALENCE

A herniated intervertebral disk may occur at any adult age. However, it is more common as people enter middle age and age-related changes occur. The nucleus pulposus loses fluid content, and the disks are less able to absorb shocks. The disks become smaller and slip out of place more easily. Aging causes degeneration in the annulus fibrosus and the posterior longitudinal ligaments, and the vertebrae and disks are less able to respond to movement and are more easily injured.

Herniated intervertebral disks are more common in men than women. Most clients are between the ages of 30 and 50. The majority of herniated disks occur in the lumbar region (L4 or L5 to S1); when disks herniate in the cervical region, they most commonly do so at C6 to C7. Multiple herniations are not common, occurring in only about 10% of all clients (Hickey, 2003).