

adolescent who is facing scoliosis surgery, potential social isolation, pain, and uncertainty, not to mention misunderstood emotions and body image issues, must be evaluated from the adolescent's perspective to be successful in meeting the individual's needs.

When a child or adolescent first faces the prospect of a prolonged period in a brace or other device, the therapy program and the nature of the device must be explained thoroughly to both the child and the parents so they will understand the anticipated results, how the appliance corrects the defect, the freedoms and constraints imposed by the device, and what they can do to help achieve the desired goal. Management involves the skills and services of a team of specialists, including the orthopedist, physical therapist, orthotist (a specialist in fitting orthopedic braces), nurse, social worker, and sometimes a thoracic or pulmonary specialist.

It is difficult for a child to be restricted at any phase of development, but adolescents need continual positive reinforcement, encouragement, and as much independence as can be safely assumed during this time. Guidance and assistance regarding anticipated problems, such as selection of clothing and participation in social activities, are appreciated by adolescents. Socialization with peers is strongly encouraged, and every effort is expended to help the adolescent feel attractive and worthwhile.

### **Preoperative Care**

The preoperative workup usually involves a radiographic series, including bending or traction spine films, pulmonary function studies, and serologic laboratory studies (including prothrombin, partial thromboplastin, and platelet function test; blood count; electrolyte levels; urinalysis and urine culture; and blood levels of any medications). Spinal surgery typically results in considerable blood loss, so several options are considered preoperatively to maintain or replace blood volume. These options include autologous blood donations obtained from the patient before the surgery; intraoperative blood salvage; intraoperative hemodilution; erythropoietin administration; and controlled induced hypotension, which must be carefully monitored at all times to prevent physiologic instability.

Surgery for spinal fusion is complex, and often adolescents who require the procedure due to idiopathic scoliosis are not familiar