

Scoliosis essay

[Business](#), [Management](#)



The majority of scoliosis is “ idiopathic” meaning the cause is unknown. “ It is responsible for 60 % of the cases. ” However, scoliosis can have some genetic predisposition or familiar inheritance pattern.

It also can be caused by various congenital abnormalities such as: muscular dystrophy, spina bifida, neuromuscular disease, cerebral palsy, or marfan’s syndrome. Most frequently this condition develops as “ idiopathic” during middle or late childhood, during the growth spurt of early adolescence.

Everyone’s spine has a natural curve. If the curve is less than 10 degrees, it is considered a postural curve. Scoliosis is defined as a lateral curvature of the spine. ” The spine of someone with scoliosis will have a “ C” or “ S” shape appearance rather than a straight line in that of a normal spine.

Usually screenings for scoliosis begin during preadolescents. The most important part of management is early detection of its presence, which may help to prevent the need for surgery. The assessment includes: observing the child’s back wearing underwear only (females can wear bra also), have child bend over at waist with arms hanging down which is called the Adam’s test. Using a scoliometer can assist to measure the degree of curvature of the spine.

The nurse should observe for asymmetry in the scapula, flanks of the shoulders, ribs and hips. A history of poorly fitting slacks or skirts can be significant in the assessment of possible scoliosis. Other signs may include: uneven shoulder blades, a protruding scapula with one side of back higher than the other, protruding hip, hip and buttock asymmetry, misaligned truck or pelvis and obvious spinal curvature. To confirm the presence of scoliosis,

spinal radiographs in a standing position can show the severity and the location of the spinal curve, and also use of the Cobb technique that establishes the degree of spinal curvature.

The Risser scale is to evaluate skeletal maturity. The MRI and CT scan can also be diagnostic tools. Treatment of scoliosis consists of a variety of treatment options ranging from periodic observation, bracing and exercise, or even surgery depending on the severity of the spinal curvature. Spinal curvatures that range from 10 to 20 degrees are considered a mild curvature of the spine. Treatment for mild scoliosis may consist of periodic observation, bracing, and exercise. Exercises help to prevent atrophy of the spine and abdominal muscles. “ According to our evidence based research article, all studies confirmed the efficacy of exercises in reducing the progression rate and/or improve the Cobb angles.

Exercises were also shown to be effective in reducing brace prescription. ” If a brace is prescribed in a case of mild scoliosis, it is important to instruct the child to wear the brace 23 out of 24 hours per day. You should also monitor for signs of skin breakdown when the child is wearing the brace. Instructing family and child of the importance of compliance to therapy is imperative. The Boston Brace, Thoracolumbosacral Orthosis (TLSO), and the Milwaukee Brace are various braces that may be prescribed. It is important to keep in mind that although braces may slow progression of the curvature to allow growth and maturity; It is not considered a curative treatment. ” A curvature that consists of 40 degrees or more is considered severe scoliosis. If this is the case, surgical intervention will be necessary.

At this point bracing and exercise is not an effective treatment option. Surgery can realign and fess the spine to correct the curvature. Internal fixation systems can help to accomplish this goal, such as: Harrington, Dwyer, Zielke, along with fusion of realigned spine.

Preoperative and postoperative nursing care is very important. Prior to surgery a type and cross match for blood is usually indicated due to an expected considerable blood loss during spinal surgery. The option of autologous blood donation may be obtained before surgery and transferred back to patient after surgery.

Extensive preoperative teaching is essential to prepare the patient such as: teaching various respiratory techniques to reduce postoperative complications, demonstrating log rolling technique used after surgery, teaching how to use the patient controlled analgesia pump (PCA), and teaching the function of other equipment that may be used such as a chest tube and foley catheter. Postoperative care will include monitoring in an acute care setting. Frequent assessments of the following: vital signs, respiratory status, wound site for bleeding/drainage, circulation, and neurological status of extremities, absence of bowel sounds or abdominal distention is a part of nursing care for the postoperative period that is very important in identifying any postoperative complications that may arise. “ Prompt recognition of any neurological impairment is imperative because delayed paralysis may develop that requires surgical intervention. The nurse must also assess pain and administer pain medications as prescribed or monitor and regulate the use of a PCA pump as prescribed.

Positioning and log rolling to prevent damage to fusion and instrumentation is also an important aspect of nursing care along with other routine preoperative and postoperative nursing care and teaching. It is also to continually monitor and observe for any signs and symptoms that may indicate postoperative complications, such as: hemorrhage, infection, and ileus.