CT Children's CLASP Guideline

Scoliosis

INTRODUCTION

Scoliosis is a side to side curvature of the spine that can occur throughout childhood, but is most commonly seen in the periadolescent years and frequently identified during periods of rapid growth. Scoliosis should be regarded as a sign and not a diagnosis, as there are many potential causes of scoliosis, including congenital spine malformations and neuromuscular disorders. The most common form of scoliosis is idiopathic, where no clear etiology exists in an otherwise healthy patient.

Waistline asymmetry, scapular asymmetry and rib prominence may be the initial signs of an underlying scoliosis. As scoliosis progresses, these asymmetries typically worsen. Curve progression in idiopathic scoliosis is related to growth remaining. Skeletally mature patients (Tanner stage IV or age 15 for girls and age 17 for boys) with mild curves will not progress while skeletally immature patients are at high risk for progression. Skeletally mature patients with large curves (>50 degrees), however, can continue to progress slowly over their lifetime. Treatment is dictated by skeletal maturity and curve magnitude and may include observation, bracing or surgical treatment.

INITIAL EVALUATION AND MANAGEMENT

INITIAL EVALUATION:

- Child's medical history including growth and development (assess phase of growth & development: stage of puberty)
- Physical examination with Scoliometer *(http://www.scoliosis.org/store/scoliometer.php)*

INITIAL MANAGEMENT:

- Scoliometer Measurements
  - < 5 degrees: monitor at well-child visits
  - > 5 degrees: PA standing scoliosis radiograph for skeletally immature children

WHEN TO REFER

Referral timing based on assessment of patient by PCP:

Radiographic Curve	Skeletal Maturity	Recommended course of action
<15 degrees	Skeletally immature	Monitor at well-child visits. Repeat PA standing scoliosis radiograph in 1 year in prepubertal children.
>15 degrees	Skeletally immature	Routine referral (1-2 months)
>35 degrees	Skeletally mature	Routine referral (1-2 months)
<35 degrees	Skeletally mature	Optional referral for discussion purposes only as treatment not indicated

URGENT REFERRAL (within 1 week):

- Child of any skeletal maturity with spinal deformity, markedly restricted back motion and > 3 months of persistent or worsening back pain

Skeletally immature child (Risser sign 0, 1; premenarchal or within 1 year of menarche)
Skeletally mature child (Risser sign 4,5; late puberty or post-menarchal)

HOW TO REFER	**Referral to Orthopedics via CT Children's One Call Access Center** For more information on how to place referrals to Connecticut Children's, click **here**. **Phone:** 833.733.7669 **Fax:** 833.226.2329 ***Information to be included with the referral:*** ▪ X-ray report or CD-ROM copy of x-ray, if available. Completing X-ray at CT Children's will facilitate evaluation. ▪ Notable physical exam findings
WHAT TO EXPECT	**What to expect from CT Children's Visit:** ▪ Focused examination by a skilled APRN, PA, or MD ▪ Additional studies as indicated – Xrays, MRI, CT ▪ Treatment (bracing, surgery, physical therapy) or continued observation as indicated