



## Directory

| Diagnosis/Symptoms                                     | Page |
|--|------|
| <b>Growth Disorders</b>                                |      |
| Short Stature.....                                     | 2    |
| Tall Stature.....                                      | 2    |
| <b>Insulin Resistance</b> .....                        | 3    |
| <b>Pubertal Disorders</b>                              |      |
| Precocious Puberty.....                                | 4    |
| Early Childhood Breast Development.....                | 4    |
| Delayed Puberty .....                                  | 5    |
| Premature Menses .....                                 | 5    |
| <b>Thyroid Disorders</b>                               |      |
| Congenital Hypothyroidism .....                        | 6    |
| Acquired Hypothyroidism (Hashimoto's Thyroiditis)..... | 6    |
| Neonatal Hyperthyroidism .....                         | 7    |
| Acquired Hyperthyroidism (Grave's Disease) .....       | 7    |
| Goiter .....   | 8    |



| <p><b>Diagnosis/symptom for Growth Disorders</b></p> <p><b>Short Stature</b></p> <p>Note: Growth is better evaluated after age 2 years. Please note that poor weight gain in the face of normal linear growth is evaluated in the Seattle Children's Nutrition Clinic. Exceptions include infants with midline abnormalities or males with hypospadias or cryptorchidism.</p> | <p><b>Referring provider's initial evaluation and management can include:</b></p> <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• TSH</li> <li>• Free T4 OR T4</li> <li>• Electrolytes</li> <li>• Blood Count</li> <li>• IGF-1</li> <li>• Chromosomes</li> </ul> <p>RADIOGRAPHIC STUDIES:</p> <ul style="list-style-type: none"> <li>• Bone Age</li> </ul> | <p><b>When to initiate referral:</b></p> <ul style="list-style-type: none"> <li>• Child is less than 5th percentile in height</li> <li>• Strongly recommend referral if child is &gt; 2 years old and growth velocity less than 4 cm a year for greater than 1 year</li> </ul> | <p><b>What can referring provider send?</b></p> <ul style="list-style-type: none"> <li>• Essential: <ul style="list-style-type: none"> <li>• Prior growth data/growth charts</li> <li>• Relevant laboratory studies</li> <li>• Have patient bring bone age X-ray to clinic, if done</li> <li>• Pertinent medical records</li> </ul> </li> <li>• Results of any additional tests</li> </ul> | <p><b>Children's workup will likely include:</b></p> <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Monitoring of interval growth</li> </ul> |
|---|--|--|--|---|
| <p><b>Tall Stature</b></p>  | <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• TSH</li> <li>• Free T4 OR T4</li> <li>• Electrolytes</li> <li>• Blood Count</li> <li>• Growth Hormone</li> <li>• IGF-1</li> <li>• Chromosomes</li> </ul>   | <ul style="list-style-type: none"> <li>• Child is &gt; 2 years old and is greater than 97th percentile for height</li> <li>• Child is &gt; 2 years old and progressively crossing centiles for height</li> </ul>   | <ul style="list-style-type: none"> <li>• Essential: <ul style="list-style-type: none"> <li>• Prior growth data/growth charts</li> <li>• Relevant laboratory studies</li> <li>• Have patient bring bone age X-ray to clinic, if done</li> <li>• Pertinent medical records</li> </ul> </li> <li>• Results of any additional tests</li> </ul>   | <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Monitoring of interval growth</li> </ul>  |

*Clinic phone: 206-987-2640. To request a consult or referral, please call the Clinical Intake Nurses at 206-987-2080 or toll free at 866-987-2080. You may fax a New Appointment Request Form to 206-985-3121 or toll free at 866-985-3121. To speak with a Seattle Children's physician for an urgent phone consultation, call the Physician Operator at 206-987-7777 or toll free at 877-985-4637.*



**Diagnosis/symptom**

**Insulin Resistance**

**NOTE:**

Other overweight/obese children and adolescents, who do not meet these criteria, see the Consult and Referral Guidelines for:

Child Wellness Clinic:

Primary concern is overweight

Adolescent Wellness Clinic:

Primary concern is overweight

Lipid Clinic: Primary concern is dyslipidemia

Hypertension/Nephrology Clinic: Primary concern is hypertension

Gastroenterology Clinic: Primary concern is fatty liver disease

Endocrine Clinic: Primary concern is PCOS

**Referring provider's initial evaluation and management can include:**

- Essential:
  - Prior growth data/growth charts
  - Relevant laboratory studies
  - Pertinent medical records
- Results of any additional tests (Fasting lipids, glucose, ALT/AST, and insulin (if available))

**When to initiate referral:**

The following groups can be scheduled into this clinic:

- 1 **Impaired glucose tolerance – impaired fasting glucose** (fasting blood glucose >100 mg/dl), **OR** random or 2 hour oral glucose tolerance blood glucose > 140 mg/ dL; elevated HbA1C
- 2 **Type 2 Diabetes mellitus**
- 3 **Early onset severe obesity** (BMI > 99%tile and less than 5 years of age)
- 4 **Obesity** (BMI > 95th percentile) in patient with other non-obesity related condition (internal referrals from hem/onc, rheum, etc), or after discussion with Drs. Koves, Roth, Taplin
- 5 **Obesity** (BMI > **99th percentile**) + 2 abnormal metabolic criteria (see column 4)

**What can referring provider send?**

For **group 5**, two or more of the following are required:

- Abnormal lipid profile (**fasting** triglycerides > 200, cholesterol > 200, LDL > 150, or HDL < 35mg/dl or >95th percentile for age, ADA guidelines)
- Hypertension: On repeated measures according to NIH guidelines systolic blood pressure >130 or **systolic/ diastolic blood pressure > 95th percentile for age**
- Abnormal LFTs (ALT > 70 U/L, or >50% above upper normal threshold)
- Family history of diabetes, early CVD (before age 50 years)
- Hyperandrogenemia in girls, hirsutism (significantly increased body hair growth)

**Children's workup will likely include:**

- History, physical exam, evaluation of growth charts
- Evaluation of prior labs if available
- Additional labs if needed
- Imaging studies may be necessary



|  |  |  |  |  |
|--|--|--|--|--|
| <p><b>Diagnosis/symptom for Pubertal Disorders</b></p> <p><b>Precocious Puberty</b></p>  | <p><b>Referring provider's initial evaluation and management can include:</b></p> <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• LH</li> <li>• FSH</li> <li>• Testosterone (males)</li> <li>• Estradiol (female)</li> <li>• TSH</li> <li>• Free T4</li> </ul> <p>RADIOGRAPHIC STUDIES:</p> <ul style="list-style-type: none"> <li>• Bone Age</li> </ul> | <p><b>When to initiate referral:</b></p> <ul style="list-style-type: none"> <li>• Breast development or pubic hair in girls &lt; 8 years old</li> <li>• Testicular enlargement (3 cc or &gt; 2.5 cm) or pubic hair in boys &lt; 9 years old</li> </ul> | <p><b>What can referring provider send?</b></p> <ul style="list-style-type: none"> <li>• Essential: <ul style="list-style-type: none"> <li>• Prior growth data/growth charts</li> <li>• Relevant laboratory studies</li> <li>• Have patient bring bone age X-ray to clinic, if done</li> <li>• Pertinent medical records</li> </ul> </li> <li>• Results of any additional tests</li> </ul> | <p><b>Children's workup will likely include:</b></p> <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Imaging studies may be necessary</li> </ul> |
| <p><b>Early Childhood Breast Development</b></p> <p>A little breast development in girls 12-24 months of age is not uncommon and usually not of concern.</p> | <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• LH</li> <li>• FSH</li> <li>• Estradiol (female)</li> <li>• TSH</li> <li>• Free T4</li> </ul>   | <ul style="list-style-type: none"> <li>• Progressing over time</li> <li>• Accelerated growth</li> <li>• Vaginal bleeding</li> <li>• Café au lait spots on physical exam (possible McCune-Albright syndrome)</li> </ul>                                 | <ul style="list-style-type: none"> <li>• Essential: <ul style="list-style-type: none"> <li>• Prior growth data/growth charts</li> <li>• Relevant laboratory studies</li> <li>• Pertinent medical records</li> </ul> </li> <li>• Results of any additional tests</li> </ul>   | <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Imaging studies may be necessary</li> </ul>  |



| <p><b>Diagnosis/symptom for Pubertal Disorders</b></p> <p><b>Delayed Puberty</b></p> | <p><b>Referring provider's initial evaluation and management can include:</b></p> <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• LH</li> <li>• FSH</li> <li>• Prolactin</li> <li>• Estradiol (female)</li> <li>• TSH</li> <li>• Free T4</li> </ul> <p>RADIOGRAPHIC STUDIES:</p> <ul style="list-style-type: none"> <li>• Bone Age</li> </ul> | <p><b>When to initiate referral:</b></p> <ul style="list-style-type: none"> <li>• For boys: no testicular enlargement by 14 years of age</li> <li>• For girls: no breast development by 13 years of age, or no menses by 16 years of age</li> </ul> | <p><b>What can referring provider send?</b></p> <ul style="list-style-type: none"> <li>• Essential:               <ul style="list-style-type: none"> <li>• Prior growth data/growth charts</li> <li>• Relevant laboratory studies</li> <li>• Have patient bring bone age X-ray to clinic, if done</li> <li>• Pertinent medical records</li> </ul> </li> <li>• Results of any additional tests</li> </ul> | <p><b>Children's workup will likely include:</b></p> <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs such as chromosomal analysis may be indicated</li> <li>• Imaging studies may be necessary</li> </ul> |
|--|---|---|--|--|
| <p><b>Premature Menses</b></p> <p>Consider vaginal foreign body</p>                  | <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• LH</li> <li>• FSH</li> <li>• Prolactin</li> <li>• Estradiol (female)</li> <li>• TSH</li> <li>• Free T4</li> </ul> <p>RADIOGRAPHIC STUDIES:</p> <ul style="list-style-type: none"> <li>• Bone Age</li> <li>• Pelvic Ultrasound</li> </ul>  | <ul style="list-style-type: none"> <li>• Vaginal bleeding in girls &lt; 10 years of age</li> <li>• Vaginal bleeding in any girls without signs of puberty</li> </ul>  | <ul style="list-style-type: none"> <li>• Essential:               <ul style="list-style-type: none"> <li>• Prior growth data/growth charts</li> <li>• Relevant laboratory studies</li> <li>• Have patient bring bone age X-ray to clinic, if done</li> <li>• Pertinent medical records</li> </ul> </li> <li>• Results of any additional tests</li> </ul>   | <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Imaging studies may be necessary</li> </ul>  |



|   |  |  |   |  |
|---|--|--|---|--|
| <p><b>Diagnosis/symptom for Thyroid Disorders</b></p> <p><b>Congenital Hypothyroidism</b></p>   | <p><b>Referring provider's initial evaluation and management can include:</b></p> <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• Thyroid Function (T4, FT4, TSH)</li> </ul>   | <p><b>When to initiate referral:</b></p> <ul style="list-style-type: none"> <li>• Abnormal newborn screen</li> </ul>   | <p><b>What can referring provider send?</b></p> <ul style="list-style-type: none"> <li>• Thyroid function tests, including results from state newborn screening program and any other labs obtained</li> </ul>  | <p><b>Children's workup will likely include:</b></p> <ul style="list-style-type: none"> <li>• History, physical exam,</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Imaging studies such as a nuclear medicine thyroid scan or thyroid ultrasound may be indicated</li> </ul> |
| <p><b>&gt; Urgent referral recommended for congenital/newborn hypothyroidism</b></p> <p>Refer to clinic immediately. Mark referral <b>URGENT</b> as most often baby will need to be seen in 1-2 days.</p> |  |  |   |  |
| <p><b>Acquired Hypothyroidism (Hashimoto's Thyroiditis)</b></p>   | <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• TSH</li> <li>• T4</li> <li>• Free T4</li> <li>• Thyroglobulin and peroxidase antibodies desirable</li> </ul> <p>RADIOGRAPHIC STUDIES:</p> <ul style="list-style-type: none"> <li>• Thyroid scan</li> <li>• Ultrasound</li> </ul> | <ul style="list-style-type: none"> <li>• Elevated TSH &gt; 10 mIU/ml, low T4/free T4</li> <li>• If TSH &lt; 10 mIU/ml and T4/free T4 normal, consider obtaining thyroid antibodies and repeating TFTs in 2-3 months prior to referral</li> </ul> | <ul style="list-style-type: none"> <li>• Pertinent medical records</li> <li>• Relevant laboratory studies (thyroglobulin and peroxidase antibodies if obtained)</li> <li>• Radiographic studies: Thyroid scan and ultrasound is not needed but report if studies obtained</li> <li>• Results of any additional tests</li> </ul> | <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Imaging studies may be necessary</li> </ul>  |



|  |  |   |   |   |
|--|--|---|---|---|
| <p><b>Diagnosis/symptom for Thyroid Disorders</b></p> <p><b>Neonatal Hyperthyroidism</b></p>   | <p><b>Referring provider's initial evaluation and management can include:</b></p> <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• TSH</li> <li>• T4</li> <li>• T3</li> <li>• Free T4</li> </ul>  | <p><b>When to initiate referral:</b></p> <ul style="list-style-type: none"> <li>• Suppressed TSH</li> <li>• Elevated T4/free T4 in newborn</li> </ul> | <p><b>What can referring provider send?</b></p> <ul style="list-style-type: none"> <li>• Pertinent medical records</li> <li>• Relevant laboratory studies</li> <li>• Results of any additional tests</li> </ul> | <p><b>Children's workup will likely include:</b></p> <ul style="list-style-type: none"> <li>• History, physical exam,</li> <li>• Evaluation of prior labs</li> <li>• Additional labs if needed</li> </ul>                                 |
| <p><b>&gt; Urgent referral recommended for neonatal hyperthyroidism</b></p> <p>Usually occurs in context of mother with Grave's disease. Refer to clinic immediately. Mark referral as <b>URGENT</b>, as most often baby will need to be seen in 1-2 days.</p> |  |   |   |   |
| <p><b>Acquired Hyperthyroidism (Grave's Disease)</b></p> <p>Usually goiter present but not always.</p>   | <p>History and physical exam:</p> <p>LABS:</p> <ul style="list-style-type: none"> <li>• TSH</li> <li>• T4</li> <li>• T3</li> <li>• Free T4</li> </ul> <p>RADIOGRAPHIC STUDIES not needed:</p> <ul style="list-style-type: none"> <li>• Thyroid scan</li> <li>• Ultrasound</li> </ul> | <ul style="list-style-type: none"> <li>• Suppressed TSH</li> <li>• Elevated T4, T3/free T4</li> </ul>   | <ul style="list-style-type: none"> <li>• Pertinent medical records</li> <li>• Relevant laboratory studies</li> <li>• Results of any additional tests</li> </ul>   | <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Imaging studies may be necessary</li> </ul> |



| <b>Diagnosis/symptom for Thyroid Disorders</b><br><br><b>Goiter</b> | <b>Referring provider's initial evaluation and management can include:</b><br><br>History and physical exam:<br><br>LABS: <ul style="list-style-type: none"> <li>• Thyroid Function (T4, TSH, FT4, T3)</li> <li>• Thyroid antibodies</li> </ul> | <b>When to initiate referral:</b> <ul style="list-style-type: none"> <li>• Abnormal thyroid function tests</li> <li>• Palpable nodules or asymmetry</li> <li>• Increasing in size</li> <li>• Causing discomfort</li> </ul> | <b>What can referring provider send?</b> <ul style="list-style-type: none"> <li>• Pertinent medical records</li> <li>• Relevant laboratory studies</li> <li>• Results of any additional tests</li> </ul> | <b>Children's workup will likely include:</b> <ul style="list-style-type: none"> <li>• History, physical exam, evaluation of growth charts</li> <li>• Evaluation of prior labs if available</li> <li>• Additional labs if needed</li> <li>• Imaging studies may be necessary</li> </ul> |
|---|---|--|--|---|
|---|---|--|--|---|

**> Tips for an effective visit:**

Talk with your patient and family about the reason for the referral and the questions to be answered.

Our providers appreciate having the information ahead of time; alternatively, it can be hand carried by the family.

Provide relevant clinical notes.

**Clinic phone: 206-987-2640. To request a consult or referral, please call the Clinical Intake Nurses at 206-987-2080 or toll free at 866-987-2080. You may fax a New Appointment Request Form to 206-985-3121 or toll free at 866-985-3121. To speak with a Seattle Children's physician for an urgent phone consultation, call the Physician Operator at 206-987-7777 or toll free at 877-985-4637.**

Copyright 2012, Seattle Children's, Seattle, WA. All Rights Reserved. The enclosed policies, procedures, standards, guidelines, or other materials (including forms) are specifically for use at Seattle Children's in Seattle, Washington. We are providing these materials to you for information-sharing only.

Seattle Children's is not responsible for subsequent application of the procedures or guidelines to patient care at your facility. It is your responsibility to revise, adapt and adopt any policies, etc., for use at your facility. It is further your responsibility to become updated and to remain current in the constantly evolving area of pediatric health care. Policies and forms may not be reproduced without permission.