Wilms Tumor Follow Up

Pediatric Oncology Education Materials

History

General Health:

After abdominal and pelvic RT, check for:

- GI symptoms:
  - Abdominal pain and cramping, diarrhea/constipation, change in bowel habit, rectal bleeding
- Bladder symptoms:
  - dysuria, hematuria, frequency and any bladder infections
- Women:
  - menstrual cycle, menopausal symptoms, sexual function
- Men:
  - sexual function
- Problems with fertility: unable to conceive
- Spinal symptoms:
  - Back pain, history of fractures

After chemotherapy, check for:

- Symptoms of cardiac dysfunction (Adriamycin exposure)
  - shortness of breath on exertion
  - orthopnoea
- Problems with fertility
- Symptoms of peripheral neuropathy (Vincristine exposure)
  - numbness/pins & needles in hands and feet
  - foot drop

After chest RT, check for:

- Does the patient smoke? (tobacco or marijuana)
- Respiratory symptoms:
  - cough, shortness of breath, chest pain
- Energy level (at risk for hypothyroidism)

Examination

Always Check:

- Blood pressure
- Weight & height (BMI)
- **Chemotherapy related: Signs of:**
- Cardiac dysfunction/failure
- Peripheral neuropathy
- **Previous chest RT:**
- Examine neck to exclude thyroid nodules
- Check for scoliosis of thoracic spine
- Respiratory examination
- Cardiac examination
- In females check for palpable breast abnormalities

Previous abdominal and pelvic RT:

- Check for scoliosis as spinal growth may have been affected by RT
- Abdominal and pelvic examination
- In previous right sided tumors check for signs of liver/veno-occlusive disease

Authors: D. Lawless, F. Howard & K. Goddard: www.pedsoncologyeducation.com

Testing and Screening

Previous chest RT:

- Ultrasound scan of the thyroid every 3 years to exclude carcinoma
- If survivor smokes, then increased risk of lung cancer in long term and intermittent chest X-ray and CT scanning appropriate (no firm guidelines about timing of these investigations).
- Early screening for breast cancer in women
- Pulmonary function tests to look for restrictive defect
- If Adriamycin was also given, increased risk of cardiac dysfunction - echocardiogram every 2 - 3 years

Blood Work

- Routine blood work (CBC, lytes, creatinine, BUN & LFTs)
- Thyroid function tests (at least free T4 & TSH) if there was previous chest RT
- Fasting glucose and lipid profile to check for metabolic syndrome

General:

- Any adriamycin exposure - echocardiogram every 3 years or so
- Routine urinalysis (e.g. to rule out proteinuria)
- Bone density should be checked roughly 10 years before one would normally worry about osteoporosis
- **Previous abdominal and pelvic RT:**
- Screening for infertility (hypogonadism and early menopause in women)
- Screening for malabsorption may be important if there is a history of chronic diarrhea (this would be an unusual complication in WT as the RT doses are generally low)
- Ultrasound of the abdomen and pelvis every year or so may be helpful to exclude new masses and to exclude hydronephrosis affecting the remaining kidney
- **Early screening for colon cancer** if any abdominal RT to the abdomen, pelvis or spine. Colonoscopy should be performed beginning at age 35 years or 10 years following RT (whichever occurs last).
- If the spleen was in or very close to RT fields patient may have splenic dysfunction or be asplenic and requires specific vaccines. **Medic Alert bracelet** important if patient has splenic dysfunction

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Specialist Follow-up

General:

- May need to have other specialist physicians involved in their follow up
- Any long-term survivor of WT who has had intensive chemotherapy is at risk for early onset osteoporosis and should be seen in consultation by a specialist with expertise in this area when more than 10 years off therapy
- Supportive care:
    - Family counseling, psychology, psychiatry

Previous abdominal and pelvic RT:

- Gastroenterologist for chronic diarrhea and malabsorption
- Orthopedic/spinal service for management of scoliosis
- Endocrinologist for hypogonadism
- Immunologist may be important if there is splenic dysfunction
- **PREGNANCY**: Pregnant survivors of WT should be referred to an obstetrician who specializes in high risk pregnancy management (significantly increased risk of premature birth)

Advice

General:

- Advise about diet, exercise and lifestyle choices (such as smoking) which may further increase the risk of vascular disease.
- Diet rich in Vitamin D, calcium and dairy servings to reduce risk of osteoporosis.
- Skin previously in the RT field should be protected from the sun (more vulnerable to damage)
- Avoid lifting very heavy weights after flank or abdominal RT (spine more vulnerable to damage)
- Consider after nephrectomy avoid activities that might damage the remaining kidney (e.g. contact sports)
- Urinary tract infections should be treated very promptly (single kidney more vulnerable to damage).
- **Seek immediate medical help if a new swelling (painless or painful) appears within the previous RT field as this may be due to a second malignant neoplasm.**

Visit the COG guidelines website for more information:
http://www.survivorshipguidelines.org

DISCLAIMER: This document gives examples of the way in which patients previously treated for wilms tumor might be followed for educational purposes only. These examples are NOT guidelines for patient care.

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