Hematopoietic and Lymphoid Neoplasm Project

Introduction to Hematopoietic and Lymphoid Neoplasm Rules

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FCDS Annual Meeting
July 22, 2010

Hematopoietic Working Group

- SEER Program National Cancer Institute
- National Program of Cancer Registries Centers for Disease Control (NPCR CDC)
- American College of Surgeons Commission on Cancer (ACoS CoC)
- National Cancer Registrars Association (NCRA)
- North American Association of Central Cancer Registries (NAACCR)
- Canadian Cancer Registries (CCR)

Hematopathology and Hematology/Oncology Subject Matter Experts
Why New Rules?

- 2009 Revised WHO Classification of Tumours of Hematopoietic and Lymphoid Tissues, 4th ed.
- Based on scientific and medical advances
- Address new terminology and new codes
- Address under-reporting of cases
- Need to update reporting rules
- Need to update coding rules
  - Single vs. Multiple Primary
  - Primary Site, Histology, Grade

What is New / Different?

- Authoritative reference = WHO
- New histology terms
- New reportable conditions
- New Diagnostic Confirmation
- Transformation = New Primary

Manual and Database

- Manual contains Case Reporting Rules, Coding Rules for primary site, histology, and grade, a detailed glossary, and a number of key tables
- Database contains detailed information on each condition, diagnostic testing, abstractor notes
- Manual and Database MUST be used together
New Histology Terms and Codes

<table>
<thead>
<tr>
<th>New Histology Term</th>
<th>ICD-O Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute myeloid leukemia (megakaryoblastic) with t(1;22)(p13;q13); RBM15-MKL1</td>
<td>9911/3</td>
</tr>
<tr>
<td>Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1EVI1</td>
<td>9869/3</td>
</tr>
<tr>
<td>Acute myeloid leukemia with t(6;9)(p23;q34) DEK-NUP214</td>
<td>9865/3</td>
</tr>
<tr>
<td>ALK positive large B-cell lymphoma</td>
<td>9737/3</td>
</tr>
<tr>
<td>B lymphoblastic leukemia/lymphoma with t(12;21)(q13;q22); TEL-AML1 (ETV6-RUNX1)</td>
<td>9814/3</td>
</tr>
<tr>
<td>B lymphoblastic leukemia/lymphoma with t(9;22)(q34;q11.2); BCR-ABL1</td>
<td>9812/3</td>
</tr>
<tr>
<td>B lymphoblastic leukemia/lymphoma with t(v;11q23); MLL rearranged</td>
<td>9813/3</td>
</tr>
</tbody>
</table>

New Reportable Conditions

<table>
<thead>
<tr>
<th>New Reportable Histology</th>
<th>ICD-O Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Langerhans cell histiocytosis, NOS</td>
<td>9751/3</td>
</tr>
<tr>
<td>Myeloproliferative neoplasm, unclassifiable/Myelodysplastic/Myeloproliferative neoplasm, unclassifiable</td>
<td>9975/3</td>
</tr>
<tr>
<td>T-cell large granular lymphocytic leukemia/Chronic lymphoproliferative disorder of NK-cells</td>
<td>9831/3</td>
</tr>
</tbody>
</table>
Master List of Histology Codes

<table>
<thead>
<tr>
<th>New Histologic Term</th>
<th>2010 WHO Only</th>
<th>ICD-O-3 Only</th>
<th>WHO and ICD-O-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute basophilic leukemia</td>
<td></td>
<td>9870/3</td>
<td></td>
</tr>
<tr>
<td>Acute biphenotypic leukemia</td>
<td></td>
<td>9860/3</td>
<td></td>
</tr>
<tr>
<td>Acute erythroid leukemia</td>
<td></td>
<td>9840/3</td>
<td></td>
</tr>
<tr>
<td>Acute megakaryoblastic leukemia</td>
<td></td>
<td>9910/3</td>
<td></td>
</tr>
<tr>
<td>Acute monoblastic and monocytic leukemia</td>
<td></td>
<td>9891/3</td>
<td></td>
</tr>
<tr>
<td>Acute myeloid leukemia (megakaryoblastic) with t(1;22)(p13;q13);RBM15-1</td>
<td>9911/3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Glossary of Heme/Lymph Terms

- **Immunocytochemistry**: Cells from the bone marrow are treated with special antibodies that cause certain types of cells to change color. Immunocytochemistry is sometimes helpful in determining the exact type of acute leukemia. It is not necessary in most cases of chronic leukemia.

- **Immunophenotyping**: Analysis can be done on blood, bone marrow, lymph nodes, and any other tissue. A sample of blood, bone marrow cells, or lymph node cells is analyzed to determine the types of antigens or markers on the surface of the cell. This analysis is used to diagnose specific types of leukemia and lymphoma, for example, myelogenous leukemic cells can be distinguished from lymphomatous leukemic cells. The antigen in the cell is usually referred to as CD followed by a number (See definition of CD).

- **Induction therapy**: The initial treatment of a patient with a blood cancer with chemotherapy or radiation therapy. The aim of induction therapy is to kill a maximum number of blood cancer cells so as to induce a remission (absence of signs or effects of the disease).
Using the Manual – 4 Questions

1. Is the condition reportable?
2. How many primaries do I abstract?
3. How do I code the primary site and histology?
4. How do I code the grade?

Moving Through the Rules

The Hematopoietic Database
Heme/Lymph Training Modules

- Background / Introduction
- Disease Presentation and Diagnostic Process
- Hematopoietic Cell Lineages – Myeloid/Lymphoid
- Instructions for Assessing Case Reportability
- Coding Rules – Primary Site, Histology, Grade
- How to Use the Manual and the Database
- Using the Tables in the Manual Correctly

Summary – Heme/Lymph Rules

- Reference: WHO Preferred Terms and Codes
- Use Manual and Database as Companion Tools
- Cases diagnosed on or after January 1, 2010.
  - Registrars MUST download the Hemato Database
  - Registrars SHOULD view the 13 Training Modules
- Email NCISERQI@mail.nih.gov with questions