The Criterion

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CLL/SLL – Code to Leukemia or Lymphoma?

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The Cancer Registry of Greater California (CRGC) consisting of Regions 2, 3, 4, 5, 6, and 7/10 participates annually in the SEER POC Study. Data is collected on pre-selected sites, entered into a database provided by SEER and submitted electronically by their submission deadline. This year, one of the four sites/histologies included in the study was Chronic Lymphocytic Leukemia (CLL) diagnosed in 2008. Cases were pulled and included in the study based on existing histology codes in the Eureka database.

It became apparent early on in our study that an issue with regard to the correct coding of CLL had been identified. A total of 14 cases included in the study were determined to be miscoded to CLL upon review by CRGC's study data collectors. All of these cases had lymph node involvement and should have been coded to lymphoma according to standards for cases diagnosed prior to 2010.

Per Volume I (Section V.3.3.7 – Special Cases) for cases diagnosed prior to 2010:

> "Lymphocytic Lymphoma (small cell type) And Chronic Lymphocytic Leukemia
>
> When a case is diagnosed in a lymph node(s) or extranodal site or organ, prepare one abstract with the site and histologic type coded as lymphoma.
>
> When a case is diagnosed in the blood or bone marrow and there is no lymph node or organ involvement, prepare one abstract with the site and histologic type coded as leukemia. See Section II.1.3.6 for rules about reporting lymphoma and leukemia)."

For all cases diagnosed prior to 2010, any case with a diagnosis of CLL with ANY lymph node involvement should have histology coded to lymphoma (SLL), not leukemia (CLL).

HOWEVER, the coding rules have changed for 2010 forward. Cases diagnosed 2010 forward with a diagnosis of CLL and lymph node involvement would not necessarily be coded to lymphoma. Rather, they may be coded to leukemia depending on which of two histology rules in the Hematopoietic Database Manual apply.

Per the Hematopoietic Database for cases diagnosed 2010 forward:

> PH9: Diagnosis is B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (BCCLL/SLL), AND there is peripheral blood involvement (bone marrow may also be involved).
>
> CODE:
> 1. Primary site bone marrow (C421)
> 2. Histology B cell chronic lymphocytic leukemia/small lymphocytic lymphoma (BCCLL/SLL) (9823/3)
>
> NOTES:

Note 1: Peripheral blood involvement requires repeated CBCs with absolute lymphocyte count >5000 on repeated measures or flow cytometry that documents a clonal B-cell population in the bone marrow.

Note 2: Leukemic BCCLL will always have peripheral blood involvement. The bone marrow may or may not be involved. In later stages of the disease there may be involvement of lymph nodes, liver and spleen.

Note 3: Do not change primary site code because the spleen is involved with infiltrate. The infiltrate refers to deposits of leukemia in the spleen as a result of the spleen filtering the blood.

PH10: B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma

- Diagnosis is B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma AND Cannot verify that disease originated in bone marrow.

CODE:
1. Primary site to the site of origin (lymph node region(s), tissue, or organ)
2. Histology small B lymphocytic lymphoma (9670/3)

Note 1: Do not simply code the site of a biopsy; use the information available from scans to determine the correct primary site. See Modules 1 and 7 for more information on coding primary site for lymphoma.

Note 2: See Appendix C for help in identifying lymph node regions and codes.
Note 3: In early stages of this lymphoma (Stage I, Stage II), only lymph nodes are involved. In later stages (Stage III, Stage IV) there may be involvement of the liver, spleen and/or bone marrow.

Note 4: Small lymphocytic lymphoma is characterized by negative peripheral blood involvement (an absolute lymphocyte count <=5000 on repeated CBCs).

Let's look at a case example to see how these coding instructions apply for a case diagnosed *before* as compared to *after* 2010:

- H&P: Marked pelvic & lower retroperitoneal lymphadenopathy. CLL dx'd on Flow Cytometry. Admitted for inguinal bx.
- X-Rays/Scans: CT: Marked pelvic & lower retroperitoneal lymphadenopathy. Hepatomegaly w/o liver mass.
- Path #1: Peripheral blood flow cytometric analysis: CD5+ B-cell lymphoproliferative process most c/w chronic lymphocytic leukemia.
- Path #2 Rt inguinal LN exc bx: LN involved by CLL/SLL. No metastatic ca represented.

- Lab: WBC 92,000
- Final Dx: Chronic lymphocytic leukemia/small lymphocytic lymphoma

The above case would be coded to 9670 (SLL) **PRE-2010** following instructions in Volume I. However, **POST-2010**, the coding instruction for PH9 would apply and this case would be coded to 9823 (CLL).

Why is this important?

Our researchers (including SEER and other funding agencies) take our word for it that a case coded to histology CLL is coded correctly. Researchers that want to study CLL will pull cases based on histology codes. They do not review text. They number crunch, analyze, draw conclusions and make assumptions based solely on what we provide to them. If the histology code in Eureka is incorrect to begin with, then their analysis may either be overstating or understating the incidence. Their assumptions and conclusions may be inappropriately influenced by miscoded information.

So, make a mental note to carefully analyze CLL cases, determine the diagnosis date, and make sure to code the histology to the appropriate code based on the coding instructions applicable for that time period!