Over the year of monthly meetings, The CLL Bloodline will teach the BASICS to help understand CLL, bring news, help with the acronym and new vocabulary, and offer simple fun quizzes.

MONTHLY QUIZ: Anemia (low red blood cell [RBC] count) is a common complication in CLL. All of the following causes are directly related to CLL or its treatment except:

1. Crowding in the bone marrow by the CLL cancer cells so there is not enough room left to make red blood cells.
2. An enlarged spleen that both hoards and destroys too many red blood cells (RBC).
3. Suppression and damage of the bone marrow by chemotherapy or other drugs used to treat CLL.
4. Low levels of iron or folate or B12 limiting the raw material needed to build new RBC.
5. Destruction of the RBC by an auto-immune process (auto-immune hemolytic anemia or AIHA).
6. Direct toxic effects on the bone marrow by the CLL.
7. A rare complication where a second blood cancer called myelodysplastic syndromes or MDS develops leading to bone marrow failure.

The correct answer is #4. Although low iron, folate or B12 may be found in CLL, the disease and its treatment should not directly lead to these deficiencies. All the others are possible causes of anemia in CLL and re-enforces the importance of knowing the correct cause of the anemia, as each type is treated differently. #5, the toxic effects of the disease suppressing the marrow directly, was recently discovered.

NEWS:
On October 10, please join us for “THE BIG EVENT,” the CLL Society’s Global Virtual Patient and Caregiver Educational Forum with the who’s who of CLL presenting 5 hours of the latest important CLL information.

BASICS: Types of CLL Treatment – This month we start describing broad categories of therapy.

Chemo-immunotherapy (CIT) used to be the main treatment for CLL. Today, depending on which CLL expert you consult, there would be no role or a very limited role for only a few frontline patients with the best predictive markers. Sadly, it is being used often in the community. It consists of chemo drugs that damage the cell’s DNA and so non-specifically, kill anything that grows quickly such as cancer cells, but also skin, hair, gut, and normal blood cells. In CLL, common drugs are fludarabine (F), cyclophosphamide (C), bendamustine (B), and chlorambucil. Chemo is more effective when combined with immunotherapy (IT), usually a monoclonal antibodies (MAB) including rituximab (R), ofatumumab, and obinutuzumab (Gazyva) that target a specific marker (CD20) found only on CLL and normal B cells. Common CIT are FCR, BR and chlorambucil and obinutuzumab. There is NO role for chemotherapy alone to treat CLL, though that too is still used by many community hematologists. Studies have shown that ibrutinib in almost all circumstances is superior to both FCR and BR, making the role of CIT even more limited.

WORD/ACRONYM OF THE MONTH: CD

CD or Clusters of Differentiation are proteins on the cell surface used by flow cytometry (cellular fingerprinting) for diagnosis of CLL, or to look for minimal residual disease. They are also a target for monoclonal antibodies and CAR-T to attack, such as how rituximab seeks CD20 or CAR-Ts seek CD19.

The CLL Society is invested in your long life. Please invest in the long life of the CLL Society