

Lesson Nine Quiz

Advances in the Treatment of Chronic Myeloid Leukemia

1. **Leukemia:**
 - a. is projected to be the fifth and sixth most common cause of cancer death in males and females, respectively for 2005.
 - b. is a malignancy of hematopoietic (blood-forming) cells.
 - c. can occur in acute types with a stormy onset and chronic types with a more gradual, insidious onset.
 - d. all of the above
2. **ALL:**
 - a. is acute lymphoid leukemia and involves overproduction of lymphoblasts.
 - b. is more common in children.
 - c. presents with fatigue, bruising, nose bleeds, fever, infections, and bone pain.
 - d. all of the above
3. **AML:**
 - a. is acute myeloid leukemia and involves overproduction of myeloblasts.
 - b. is the most common type of adult leukemia.
 - c. has an overall five-year survival rate of about 20%, with older patients having the poorest prognosis.
 - d. all of the above
4. **CLL:**
 - a. is chronic lymphocytic leukemia and involves overproduction of mature-appearing lymphocytes.
 - b. occurs mostly in patients > 60 years of age.
 - c. can present in an insidious manner with the only indication being an elevated lymphocyte count.
 - d. all of the above
5. **CML:**
 - a. is chronic myeloid leukemia.
 - b. is most common in the age range of 45 to 55, however there is a trend toward increased case in younger adults.
 - c. is associated with the molecular genetic defect known as the Philadelphia chromosome which contains an abnormal hybrid *bcr-abl* gene.
 - d. all of the above
6. **Pathological and cytogenetic features of CML include:**
 - a. abnormal tyrosine kinase activity.
 - b. the presence of the Philadelphia chromosome abnormality primarily in stem cells of myeloid cell lineage.
 - c. a markedly elevated WBC count with a striking increase in neutrophils.
 - d. all of the above
7. **The initial clinical presentation of CML:**
 - a. is characterized by an acute, stormy onset of symptoms.
 - b. can be relatively asymptomatic with only a marginal increase in WBC count.
 - c. always involves fatigue, weight loss, abdominal pain, and an enlarged spleen.
 - d. all of the above.
8. **The vast majority of CML patients are initially diagnosed in the chronic phase, which can last for many years and is characterized by a relatively stable and predictable profile of signs and symptoms.**
 - a. true
 - b. false
9. **The accelerated phase of CML is often a prelude to blast crisis and involves worsening symptoms and more pronounced elevations in the WBC count and myeloblast fraction in the blood and bone marrow.**
 - a. true
 - b. false
10. **Imatinib:**
 - a. was approved in 2001 and is marketed under the brand name Gleevec.
 - b. is primarily indicated for adults with chronic phase, Philadelphia chromosome-positive CML.
 - c. inhibits the tyrosine kinase activity coded by the hybrid *bcr-abl* gene of the Philadelphia chromosome in leukemic cells.
 - d. all of the above.
11. **A complete hematologic response to treatment is essentially a normalization of cell counts and a major cytogenetic response is either a complete or partial reduction in Philadelphia chromosome-positive leukemic cells.**
 - a. true
 - b. false
12. **Compared to interferon and Ara-C, imatinib treatment of chronic phase CML:**
 - a. increases the time to disease progression.
 - b. produces greater complete hematologic response rates.
 - c. produces greater major cytogenetic response rates.
 - d. all of the above
13. **Commonly reported adverse effects of imatinib include:**
 - a. fluid retention and edema.
 - b. nausea, diarrhea, rash, fatigue, and headache.
 - c. muscle cramps, musculoskeletal pain, and joint pain.
 - d. all of the above
14. **In respect to drug interactions with imatinib:**
 - a. CYP3A4 inhibitors, such as clarithromycin, can raise imatinib plasma levels.
 - b. carbamazepine and dexamethasone can raise imatinib plasma levels.
 - c. a only
 - d. all of the above
15. **Gleevec:**
 - a. therapy for adult chronic phase CML is one 400 mg tablet daily with a meal.
 - b. therapy can cost thousands of dollars a year and requires prior authorization by pharmacy benefit managers.
 - c. availability for patients without pharmacy benefit coverage may be possible by contacting the Gleevec Reimbursement Hotline.
 - d. all of the above.
16. **Did this CE lesson achieve its stated objectives?**
 - a. yes
 - b. no
17. **How much of this lesson can you apply in your practice?**
 - a. all
 - b. some
 - c. very little
 - d. none
18. **Approximately how long did it take you to read the lesson, study it and answer all questions?**
 - a. 1 - 1.5 hours
 - b. longer
 - c. less
19. **Type of practice**
 - a. retail
 - b. hospital, institutional
 - c. pharmacy organization or academia
 - d. manufacturing, distribution, other
20. **Indicate date you completed this exam (required).**
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