Box 24-4

Common Causes of Acquired Aplastic Anemia

- Human parvovirus infection, hepatitis, or overwhelming infection
- Irradiation
- Immune disorders, such as eosinophilic fasciitis and hypoimmunoglobulinemia
- Drugs, such as certain chemotherapeutic agents, anticonvulsants, and antibiotics
- Industrial and household chemicals, including benzene and its derivatives, which are found in petroleum products, dyes, paint remover, shellac, and lacquers
- Infiltration and replacement of myeloid elements, such as in leukemia or the lymphomas
- Idiopathic (In most cases, no identifiable precipitating cause can be found.)

Diagnostic Evaluation

The onset of clinical manifestations, which include anemia, leukopenia, and decreased platelet count, is usually insidious. Definitive diagnosis is determined from bone marrow examination, which demonstrates the conversion of red bone marrow to yellow, fatty bone marrow. Severe AA is based on Camitta's criteria that include less than 25% bone marrow cellularity with at least two of the following findings: absolute granulocyte count less than 500/mm^3, platelet count less than 20,000/mm^3, and absolute reticulocyte count less than 40,000/mm^3 (Miano and Dufour, 2015; Passweg and Marsh, 2010). Moderate AA is defined as more than 25% bone marrow cellularity with the presence of mild or moderate cytopenia (Miano and Dufour, 2015; Shimamura and Guinan, 2009).