RBC Morphology Worksheet Day 3

Complete and submit answers on Blackboard for checking

1. Match each term with the best description:

   - Anisocytosis
     a. Variations in RBC shape; rigid and/or damaged RBCs
   - Microcytosis
     b. Reduced Hgb concentration; MCHC < 32.0%
   - Dimorphism
     c. Reduced RBC volume, MCV < 82.0 fl
   - Macrocytosis
     d. Presence of two/dual RBC populations
   - Hypochromia
     e. Variations in RBC size; RDW > 14.0%; heterogeneous RBCs
   - Polychromasia
     f. Increased RBC volume; MCV > 98.0 fl
   - Poikilocytosis
     g. Young RBCs with residual RNA; show diffuse basophilia with Wright’s stain

2. Match each red cell poikilocyte with the best description:

   - Elliptocyte/ovalocyte
     a. Damaged, spherically-shaped RBC; no pallor, decreased surface:volume ratio
   - Sickle cell
     b. Damaged, irregularly-shaped RBC fragment
   - Dacrocyte/teardrop
     c. RBC with pallor area; blunt evenly spaced projections or irregularly spaced projections
   - Spherocyte
     d. RBC that displays a single terminal projection
   - Codocyte/target cell
     e. RBC with elongated, oval shape
   - Acanthocyte
     f. RBC with dark staining outer and central area with pale zone between; increased surface:volume ratio
   - Echinocyte
     g. Spherically-shaped RBC; no pallor area; multiple irregularly spaced projections
   - Schistocyte
     h. Fluid crystal with sharp terminal projections; reduced oxygen tension causes Hgb S polymerization

3. Match each RBC inclusion with the best description:

   - Howell-Jolly body
     a. Iron granules at periphery of red cell
   - Pappenheimer bodies
     b. Precipitates of denatured Hgb; not seen with Wright’s stain
   - Heinz bodies
     c. Round mass of DNA; remnants of nuclear material
   - Basophilic stippling
     d. Coarse aggregates of RNA particles distributed throughout the red cell

4. Match each RBC distribution pattern with the best description:

   - Rouleaux
     a. Coining pattern of red cells
   - Agglutination
     b. Red cell clumps in a non-specific pattern