

北海道医療大学大学院医療技術科学研究科 臨床検査学専攻(修士課程)

専門科目 参考問題

- ・造血器腫瘍を分類し、各腫瘍の定義・病態・臨床症状・検査所見について説明しなさい.

以下の英文を和訳しなさい.

Collectively, the erythroid progenitors, terminally differentiating erythroblasts (precursors), and adult red cells are termed the erythron to reinforce the idea that they function as an organ. The widely dispersed cells comprising this organ arise from pluripotential hematopoietic stem cells. Following commitment to the erythroid lineage (unipotential progenitor), further maturation gives rise to the erythroid progenitors, burst-forming unit-erythroid and, subsequently, colony-forming unit-erythroid (CFU-E), that can be identified by their development into representative clonal colonies of red cells in vitro. The CFU-E then undergoes terminal differentiation, progressing through four to five morphologic stages, each having characteristic light microscopic and ultrastructural features. During terminal erythroid differentiation, there is an increasing amount of hemoglobin synthesis accompanied by nuclear chromatin condensation and at the final stage of differentiation, there is nuclear extrusion to generate an anucleate polychromatophilic macrocyte. The human polychromatophilic macrocyte (reticulocyte) matures over 2 to 3 days, first in the marrow and then in circulation into the discoid erythrocyte. During reticulocyte maturation, cytoplasmic inclusions, including residual mitochondria and ribosomes, are degraded and the reticulocyte loses surface area to achieve the mean cell volume and surface area of a discoidal erythrocyte.