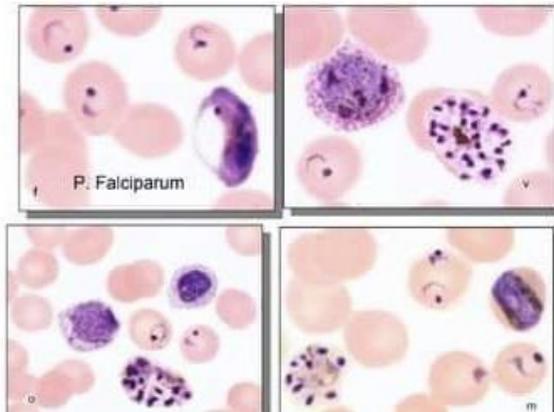


NABED LAB

Malaria in blood

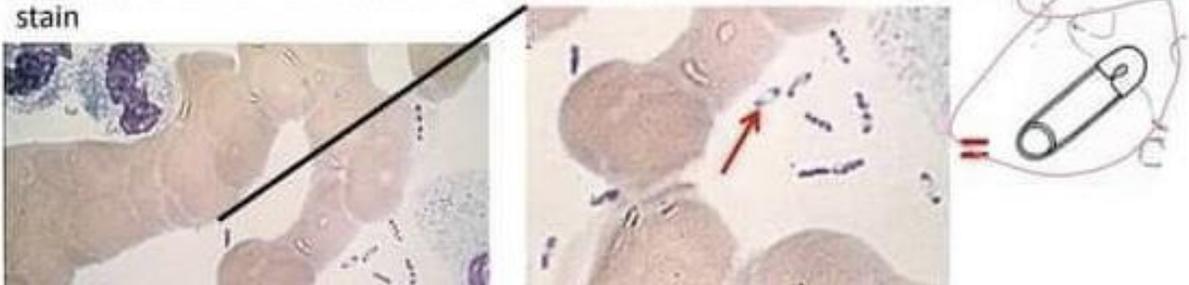


Yersinia pestis

Diagnosis

Staining pattern

Gram-negative rods (0.5 - 0.8 x 1- 3 μ m) Bipolar staining (resembling closed safety pin) may be evident with Gram stain but more apparent with Giemsa stain

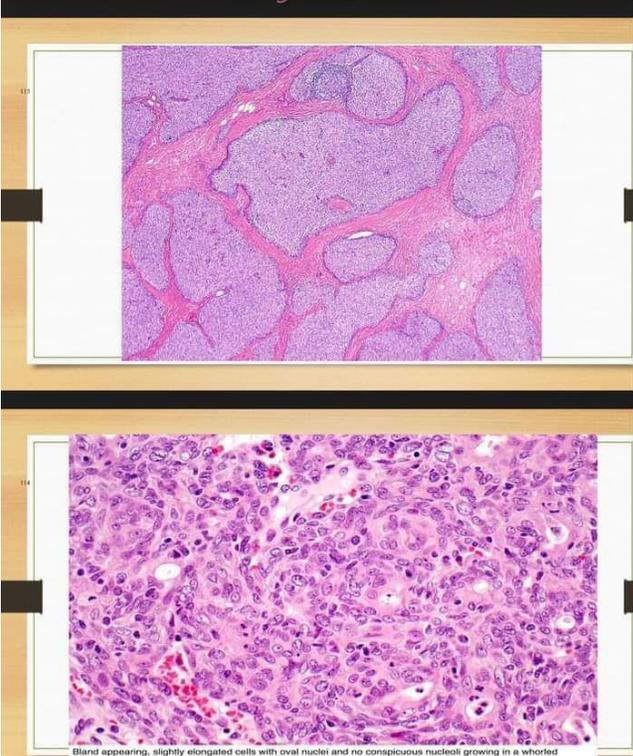


Methyl Red (MR) & Voges-Proskauer (VP) Tests

- Use:

1- MR tests for acids production from glucose fermentation.

Thymoma



trophozoite

schizont

gametocyte

P. falciparum



Diagnosis of *Salmonella Shigella*

1- *Salmonella Shigella* agar (SS agar)

Purpose

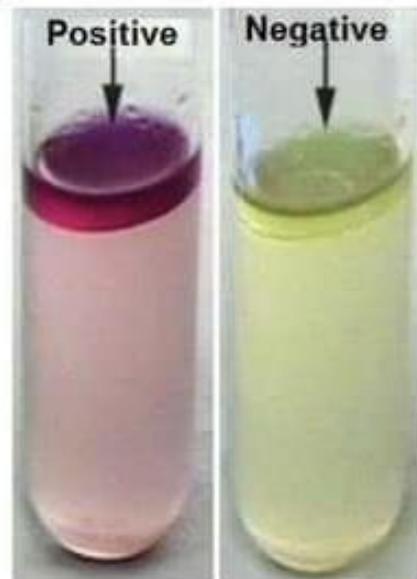
For isolation and differentiation of *Salmonella* & *Shigella*

Components

- ✓ Brilliant green dye & sodium citrate: inhibit the growth of most intestinal flora
- ✓ Lactose
- ✓ Neutral red: pH indicator, red in acidic conditions
- ✓ Sodium thiosulfate ($\text{Na}_2\text{S}_2\text{O}_3$): sulfur source
- ✓ Ferric citrate: H₂S indicator

Indole Test

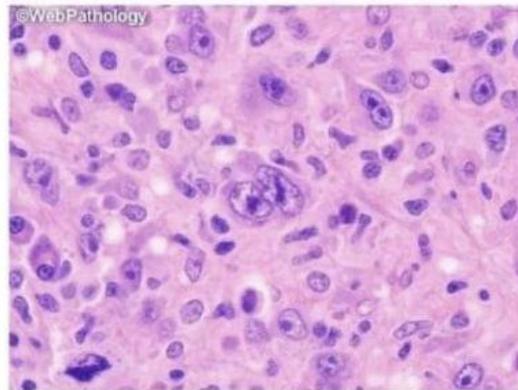
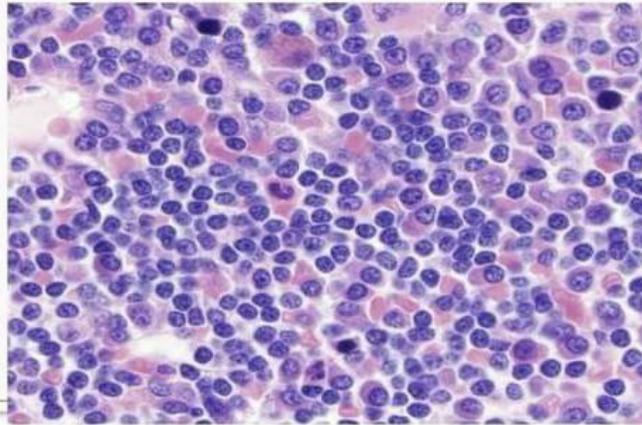
- **Use:** to determine bacterial ability to degrade amino acid tryptophan (by tryptophanase enzyme) into indole (+ Kovac's reagent (yellow) indicator) → red colour.
- **Results:**
- **Positive:** enzyme present, indole produced, red ring on top of broth e.g. *E.coli*.
- **Negative:** enzyme absent, indole NOT produced, NO colour change or clear yellow ring e.g. *Klebsiella sp.*, *Enterobacter sp.*, *Salmonella sp.*



↑
Salmonella

Lymphoplasmacytic Lymphoma - Morphology

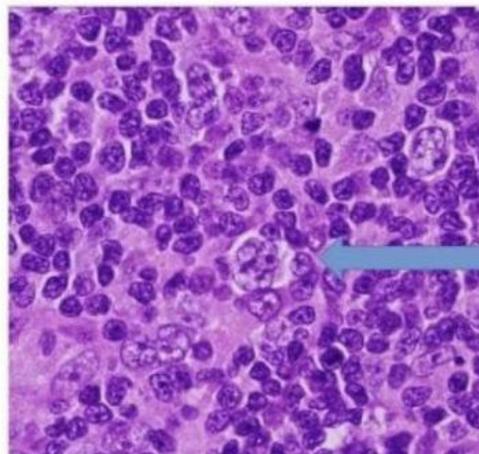
The marrow is infiltrated by lymphocytes, plasma cells, & plasmacytoid lymphocytes in varying proportions.



lymphocytes depleted

if Hodgkin

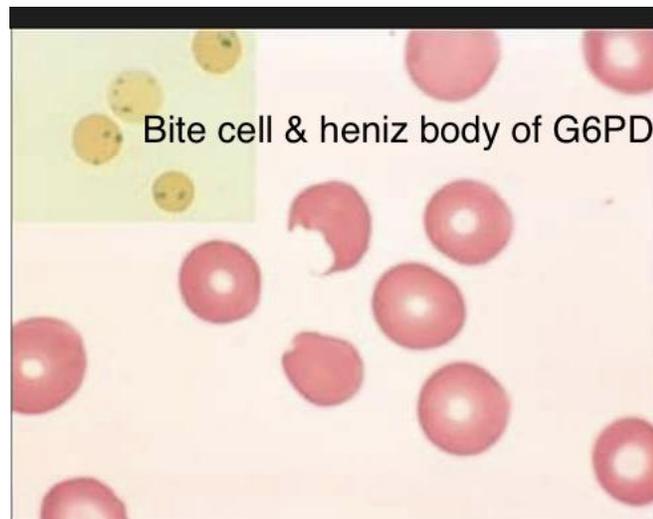
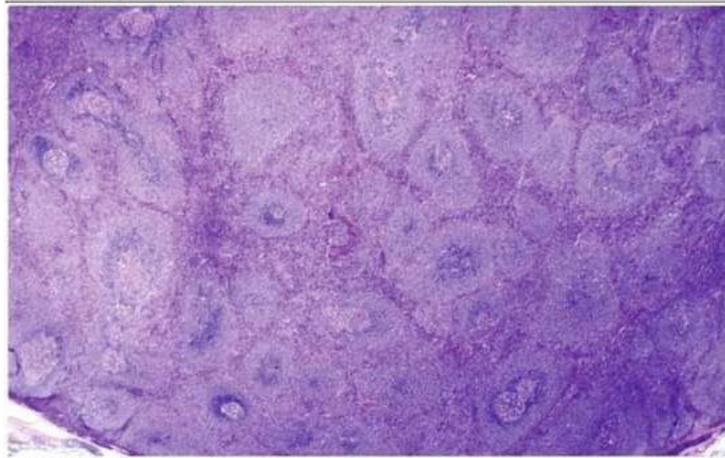
Oct?



popcorn cells



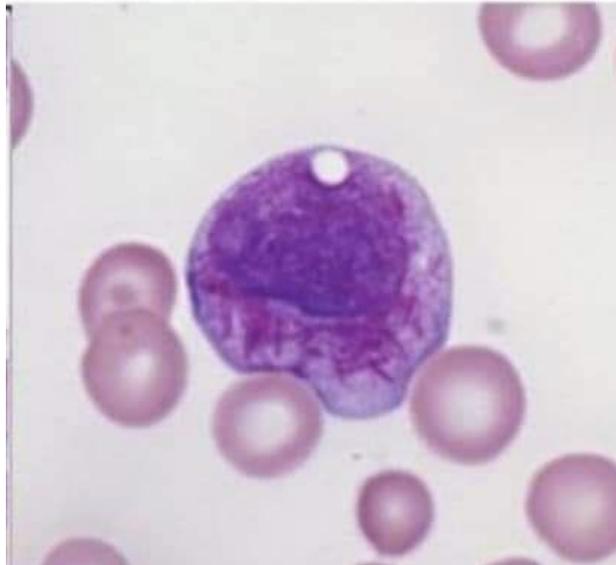
Mantle Cell Lymphoma



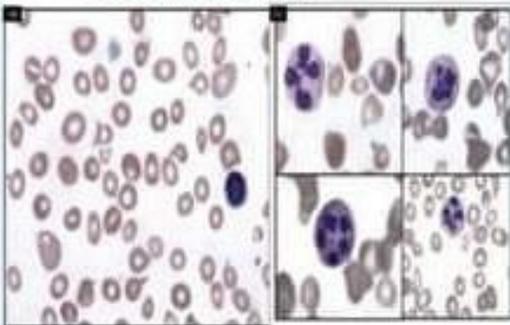
thalassemia



Auer rods: distinctive red-staining needle-like azurophilic granules, present in many cases. Numerous in acute promyelocytic leukemia (APL).



38. This is a blood film for a 55-year-old male who presented with weakness and fatigue. What is the most common cause on this case?



- a. B12 Deficiency.
- b. Hypothyroidism.
- c. Folate Deficiency.
- d. B12 Deficiency or folate Deficiency.
- e. B12 Deficiency or hypothyroidism.

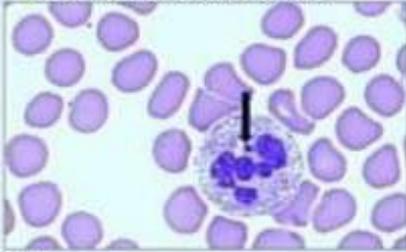


36. The true statement for this organ is?



- a. Contain primary nodules only.
- b. Contain single crypt.
- c. Contain single fold.
- d. Covered by non keratinized stratified epithelium.
- e. Presence of palatine gland near the epithelium.

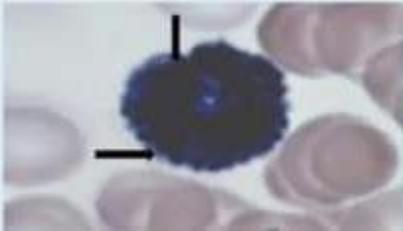
28. The pointed structure is?



Select one:

- a. Microphage — Barr body.
- b. Polymorphnuclear cell — Barr body in male.
- c. Neutrophils — condensed active X chromosome in male. OO d. Neutrophil — condensed active X chromosome in female.
- e. Lymphocyte — condensed inactive X chromosome in female.

29. The true statement for the pointed blood cell?



Select one:

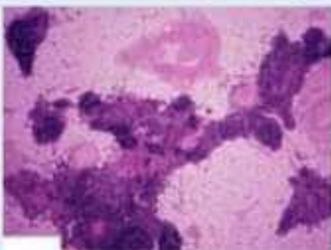
- a. Derived from lymphoid colony.
- b. Characterized by metachromasia.
- c. Increase with parasitic infection. OO
- d. Its total count 1/2 - 1%.
- e. Bilobed C- shape nucleus.

23. Heamatocrite value is % ratio of the volume of



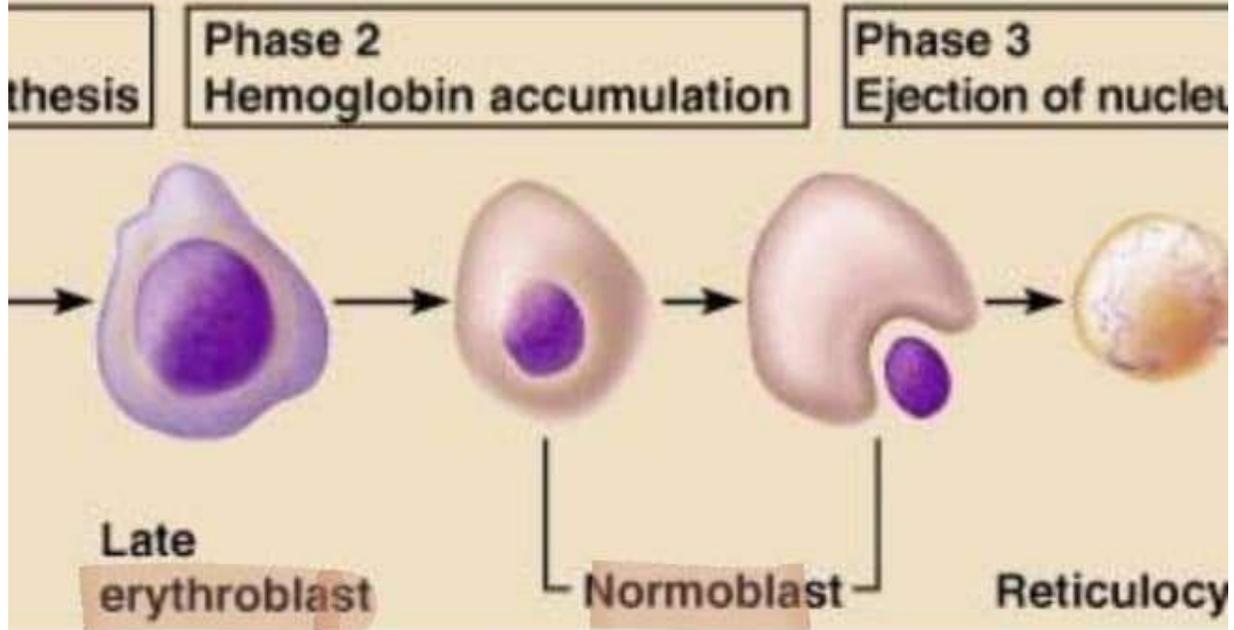
- a. WBCs to plasma.
- b. RBCs to plasma.
- c. RBCs to whole blood.
- d. Total blood to RBCs.
- e. Plasma to plasma proteins.

8. Concerning this organ the TRUE statement is?

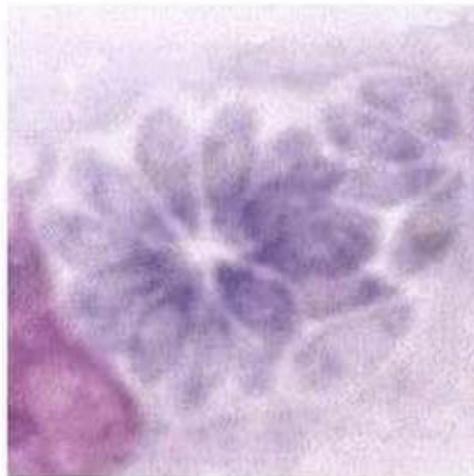


- a. Contain lymphatic nodules.
- b. Contain plasma cells.
- c. Epithelial reticular cells form reticular fibers.
- d. Contain afferent lymphatic.
- e. Epithelial reticular cells share in the formation of blood thymus barrier.

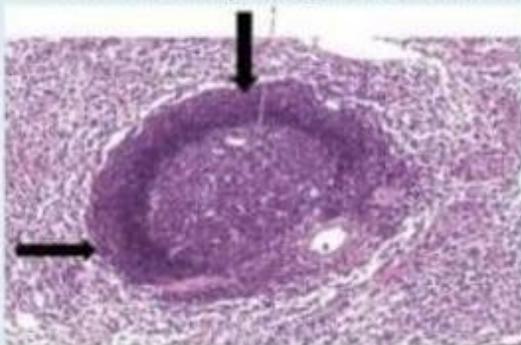
mat pathway



Toxoplasma gondii



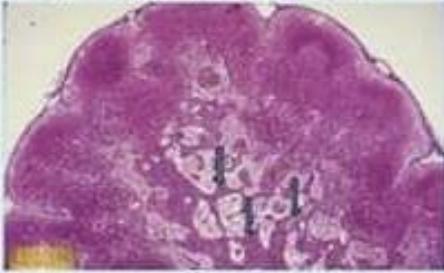
1. Identify the pointed structure?



Select one:

- a. Lymph follicles.
- b. White pulp.**
- c. Peyer's patches.
- d. Lymph node.
- e. Diffuse lymphatic tissue.

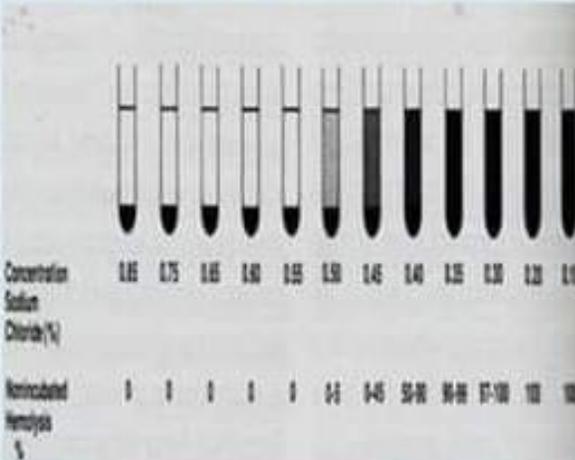
31. The pointed structure is?



Select one:

- a. Medullary sinuses in spleen.
- b. Medullary cords in spleen.
- c. Medullary cords in lymph nodes.
- d. Red pulp in spleen.
- e. White pulp.

32. Increase osmotic fragility is hand in all EXCEPT?



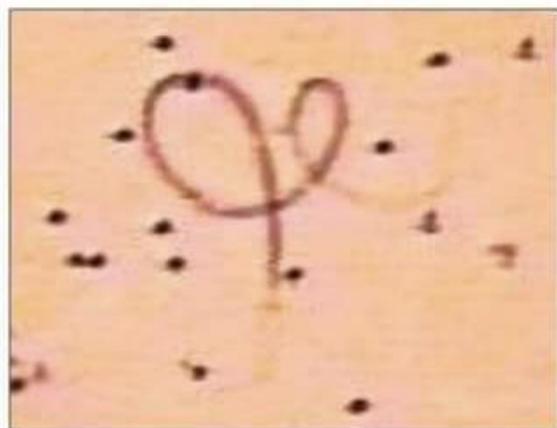
- a. Spectrin deficiency.
- b. G.6PD deficiency.
- c. Hereditary hemolytic anemia.
- d. Sickle cell anemia.
- e. Old RBCs.

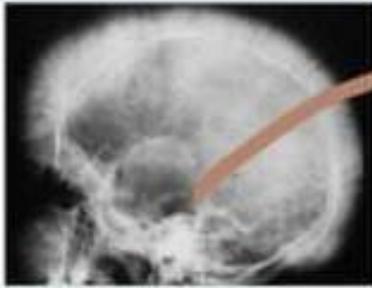
33. Glicosylated Hb (Hb A1c) is?



- a. Hb combining with O₂.
- b. Hb combining with CO₂.
- c. Hb combining with CO.
- d. Hb combining with Glucose.
- e. Hb combining with Hydrogen.

Wuchereria





- Select one:
- a. Secondary hyperparathyroidism.
 - b. Excess parathyroid hormone.**
 - c. Acromegaly.
 - d. Paget disease of bone.
 - e. Iron deficiency anemia.

التهاب العظام المتعدد

16. Which blood type is depicted in the following figure?

Anti A antibodies added Anti B antibodies added

Handwritten scribbles and redactions covering the figure and options.

The pointed structure is feature characteristic for?



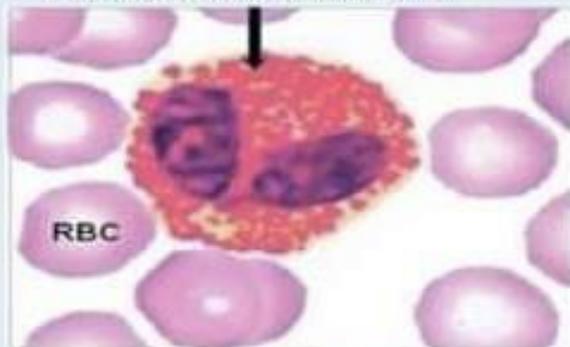
- Select one:
- a. Mature monocytes.
 - b. Mature lymphocytes.
 - c. Immature Neutrophils.
 - d. Immature megakaryocytes.
 - G. Mature megakaryocytes.**

18. This parasitic form belongs to ?



- Select one:
- a. Toxoplasma gondii.
 - b. Coxiella burnetii.
 - c. Trypanosoma brucei.**
 - d. Leishmania donovani.
 - e. Yersinia pestis.

19. The pointed cell increase in?



- Select one:
- a. Acute infection.
 - b. Chronic infection.
 - c. Malaria.
 - d. Parasitic infection.**
 - e. Lymphoma.