Packed cell volume (PCV) (Hematocrit, Hct)

is the packed cell volume of whole blood that is occupied by red blood cells . The PCV is directly related to RBC count and Hb content . The PCV is varies among domestic animals . The PCV is significant far diagnosis of some diseases like : In polycythemia \rightarrow PCV = 70 % . In anemia \rightarrow PCV = 15 % .

| Species | Sheep | Cow | Horse | Dog | Cat | Chicken | Human |
|----------------|-------|-----|-------|-----|------|---------|-------|
| PCV (%) | 32 | 40 | 42 | 45 | 37.3 | 30.6 | 45-50 |

Procedures

The PCV is usually measured in a special microhematocrit capillary tube or wintrobes Heamatocrit tube.

- 1. Touch the red –circle end of capillary (heparinized capillary tube) to the blood sample container .
- 2. Hold the tube in a horizontal position to allow the blood to enter the tube until ¾ full . Seal end of the tube with sealing compound .
- 3. Place the capillary tube in microhematocrit centrifuge with the plug end to the outside .
- 4. Centrifuge for 5 minutes.

Dr. Dakheel Hussein



