Comparison Study of Hemoglobin Values in Blood From Jugular and Cephalic Veins in Healthy Cats

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INTRODUCTION:

- Capillary blood has higher hemoglobin (Hb) values than venous blood, as reported in human medicine.
- Differences in Hb have been described in humans, when a tourniquet has been left too long, causing hemoconcentration.
- A comparison of Hb values at different collection sites has never been performed in cats. However, such knowledge may be relevant when evaluating hematological parameters.

OBJECTIVE:

- To compare Hb values obtained in blood from jugular and cephalic veins in healthy blood donor cats.

METHODS:

Porto, Portugal

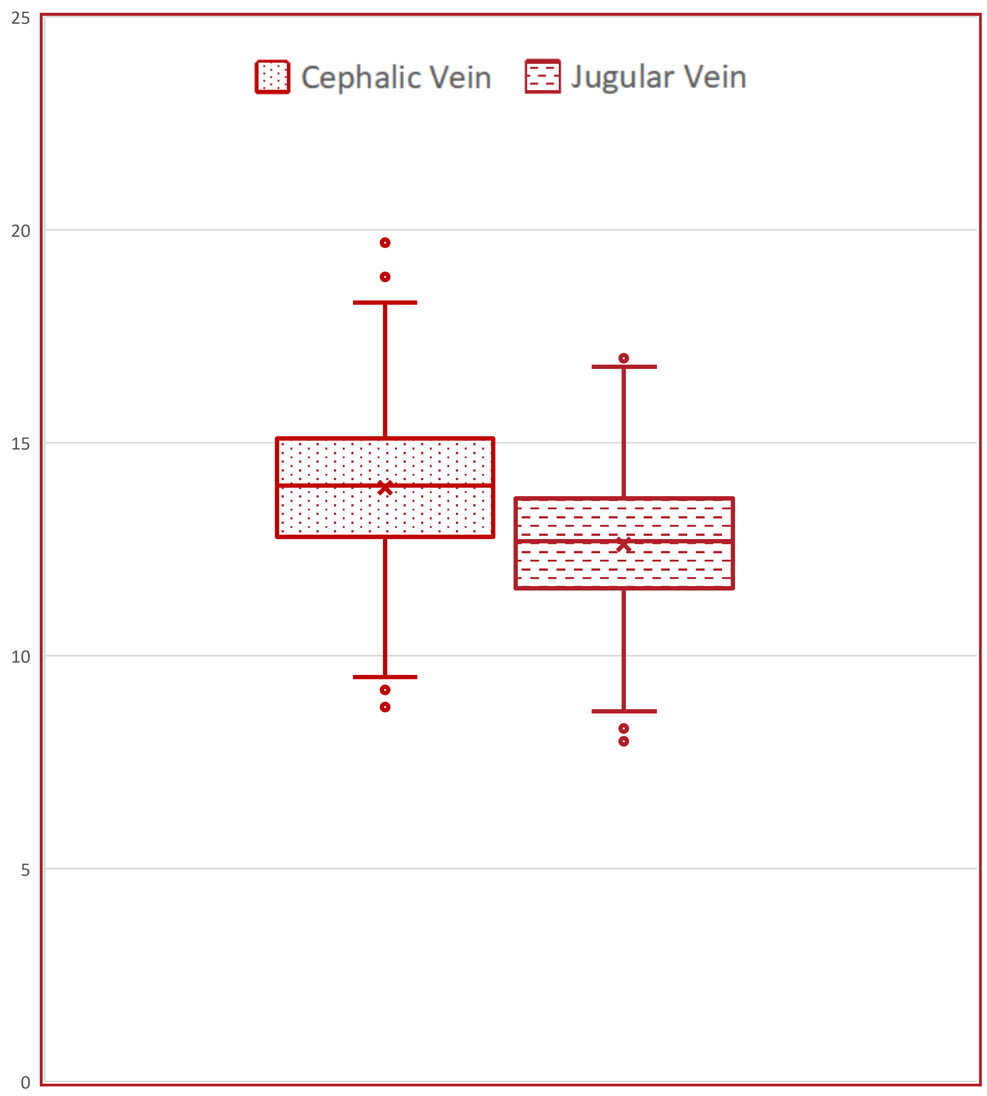
Sept to Dec 2021

867 Healthy donors

- Blood was collected from the cephalic and jugular veins immediately before donation.
- 24-Gauge catheter (cephalic vein) and 25-gauge needle (jugular vein) were used.
- Hemoglobin was measured by photometry (Compolab); samples with hemolysis were excluded.
- A paired samples t-test was used to compare the hemoglobin values in each location.

RESULTS:

CEPHALIC VEIN



JUGULAR VEIN

Graphic 1: Boxplot of hemoglobin values obtained in the cephalic and jugular veins. Outliers for both locations are also displayed.

CONCLUSION:

- Significant different Hb values can be obtained, depending on the collection site.
- Such differences may be related with hemoconcentration in cephalic vein samples.
- Further studies are warranted to understand these findings by comparing other blood analytical parameters.

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