The objective of this study was to evaluate the effect of different needle sizes used to obtain blood via jugular venipuncture in cats on routine measures of hemostasis” Solbak et al (2018).

Abstract:

Objectives: The objective of this study was to evaluate the effect of different needle sizes used to obtain blood via jugular venipuncture in cats on routine measures of hemostasis.

Methods: This was a prospective, observational, randomized, clinical study carried out at a university teaching hospital. Twenty healthy, client-owned cats were used.

Results: Each cat had blood collected via direct venipuncture from both jugular veins. Sampling of the right and left jugular vein was randomized to be collected with either a 22 G or a 25 G needle, respectively, and routine coagulation variables and platelet count were performed on all samples. Values were analyzed for differences in needle size, and site of sample collection. There was no difference between the two needle gauges in activated partial thromboplastin time, platelet count, fibrinogen degradation products, or fibrinogen, or between sampling from the left and right jugular vein. Prothrombin time (PT) was significantly higher when drawn from a 25 G needle (11.7 s) compared with a 22 G needle (11.4 s) (P = 0.01), but not different in left vs right jugular vein samples. Bland-Altman analysis of PT comparing for 25 G minus 22 G needle vs the average, calculated a mean bias (95% limits of agreement) of 0.49 s (-1.4 s to 2.4 s).

Conclusions and relevance: This study of 20 healthy cats found that the use of either a 25 G or 22 G needle for jugular venipuncture did not introduce any clinically meaningful difference in routine coagulation variables or platelet count.

Reference: