

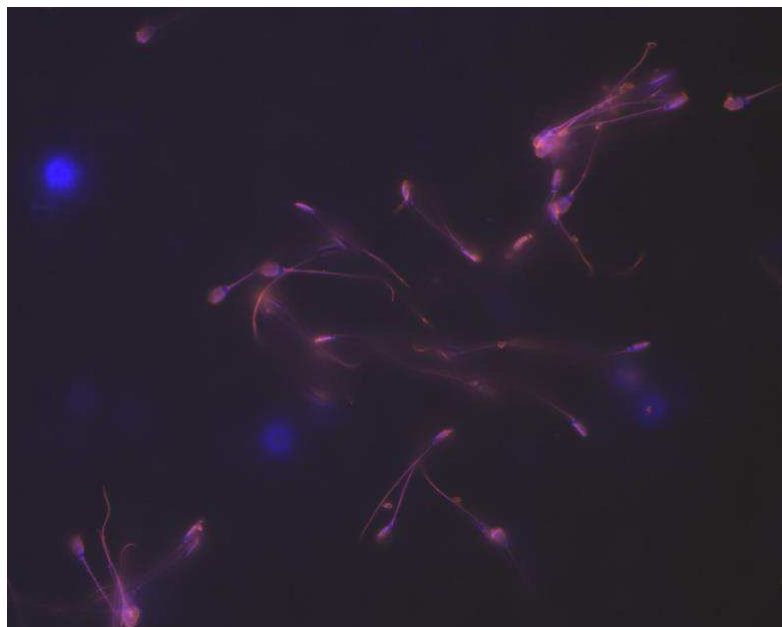
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One Health

L'Animal et l'Homme, une même santé



17. Pilot study on caudal vena cava size by fast ultrasonography through different views in healthy calves.

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Introduction: Ultrasonographic measurements of caudal vena cava (CVC) and aorta (Ao) are known as reliable tools to assess intravascular volume status in humans and companions' animals. The objective of this study was to perform a pilot study on the feasibility to obtain ultrasonographical measurements of the CVC and the aorta (Ao) in two different views, assess intra- and interobserver variability, and study the effect of age, sex, breed, or body weight on measurements in healthy calves. **Methods:** We performed a single observer prospective observational study in standing healthy calves from beef and dairy herds. All calves aged less than six weeks and weighted less than a hundred kilos and were deemed healthy based on history and clinical evaluation. Two anatomic sites were assessed by the investigator, to obtain three views of CVC and Ao (longitudinal view in subxiphoid site and transversal and longitudinal views in the paralumbar site). **Results:** 48 calves were enrolled, 22 males and 26 females, from 4 different herds. Subxiphoid view was tried on every calf but cineloop was not recorded in 20%. In the paralumbar site, cineloops were recorded on 94 % of the calves, and interpretable in 92%. A high significant linear correlation was found between the age of the calves and CVC and Ao measurements made at paralumbar views except for CVC area in transversal PV. **Conclusions:** Caudal vena cava size assessment by point of care ultrasound can be easily performed at paralumbar site in calves under 4 months of age and could be used to assess intravascular volume status. Current study is ongoing to compare CVC and Ao measurements between healthy and hypovolemic calves.

18. Assessing forest and pastureland cover in northern Morocco using remote sensing

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Northern Morocco harbors the large-scale oak forests in the country, surrounded by agricultural and pastureland mosaics. Despite the socio-economic role and the predominance of pastoral activities, especially in Western Rif (Chefchaouen), there is little information about the current land cover mapping of forests and pasturelands. The objective of this study was to spatially delineate the forest and pastureland based on remote sensing data. The available data are an image scene from the operational land imager/ thermal infrared sensor (OLI/TIRS) images, with 30 m of spatial resolution on board of Landsat 8 satellite, on July 18th, 2019. To better describe the LULC change types and to increase the probability that these changes closely reflect the ground reality based on our prior knowledge of land use in the study area, a total of seven major land cover classes were used: forest; pasture grassland under matorral, pasture grassland; grassland mixed with cultivated areas; cropland; built-up area; and water. Forest, pasture grassland, and cropland cover an area of 39, 3.9, and 3.1%, respectively. The most prominent cover land was recorded by pasture grassland mixed with cropland (51.5%). The land cover results of the forest class agree with the statistics data reported in the official reports, except for the land cover of classes including pasture grasslands, because they have never been studied before. Overall, this research contributes to knowing Western Rif's current land cover types for future interventions to develop and manage forest and pasture areas.