Summary

The dromedary camel has a very high economic importance in the Arabic countries. Nevertheless, there is a very little background literature on the use of ultrasound (US) and computed tomography (CT) in dromedaries in comparison to other domestic and farm animal species. Therefore, the tarsal region of six cadaver limbs, obtained from three orthopedic disease free dromedary camels, was evaluated via radiography, US and CT. The limbs were frozen and sectioned transversely, sagittaly and dorsally. The anatomic structures were identified and correlated to the analogous structures on the corresponding CT slices and US images and published in two manuscripts.

Radiography was performed in both standard (0º and 90º) oblique (45º and 135º) radiographic projections. The tarsus was investigated via US in four planes (dorsal, medial, lateral and plantar) and each plane was scrutinized in four levels (calcaneal tuber, tibial malleoli, base of calcaneus and proximal head of metatarsus) in both transverse and longitudinal views.

Radiography provided a good representation of the bony structures and articulations with little information on the soft tissues of the tarsus and superimposition of the tarsal bones. Ultrasonography furnished adequate delineation of the peri-articular tissues of the tarsus and was limited to the bone surface. Computed tomography provided cross sectional imaging of the dromedary tarsus without bone and soft tissue overlap and allowed visualization and differentiation of tissues in almost every situation.

This work was undertaken to document the normal appearance of the dromedary camel tarsus via radiography, ultrasonography, and computed tomography which may be used as a resource for interpretation of dromedary tarsal pathology using various diagnostic imaging modalities.

Key words: ultrrsonography, CT, camel, tarsus