The ophthalmic ultrasonography is a reliable tool to quantify the ocular dimensions and it is safe and non-invasive procedure (Dudea, 2011). Ocular ultrasound biometry was used in different animals, i.e. cat (Mirshahi et al, 2014), goat (Ribeiro et al, 2009), horse (Gialletti et al, 2018; Sorouri et al, 2009) and dromedary camel (Kelawala et al, 2015). Ultrasonographic measurements of the Bulbous oculi of the camel were done in terms of corneal thickness, anterior chamber depth, lens thickness, vitreous chamber depth, axial length and optical axis (Khan and Türker, 2021). Echobiometry of eye usually provides direct dimensions (Kelawala et al, 2015; Osuobeni and Hamidzada, 1999; Yadegari et al, 2013) but indices are more reliable than diameters because they are independent of the size (Kara et al, 2011).

Camels are vulnerable to a variety of ophthalmic problems, including corneal and eyelid laceration, panophthalmos, corneal opacity, and descematocele etc (Bishnoi and Gahlot, 2001). Ocular ultrasonography of camel eye is well studied previously (Tharwat and El-Omar, 2021; Yadegari et al, 2013). Ultrasonography of the eye provides a detailed examination of the interior of the eye.

Echobiometry of the eyes of dromedary camels is least studied, hence present study was undertaken to perform echobiometry of eye of camels by transcorneal ultrasonographic scanning.

**Materials and Methods**

Twelve live healthy adult camels with the clear cornea and without any ocular pathology were selected (6 male and 6 female) for ocular ultrasonography. Camels were restrained in sternal recumbency and mild sedation was given by xylazine hydrochloride (at the dose rate of 0.2 mg/Kg body weight) by intravenous route. B-mode transcorneal ultrasonography (Edan U2 prime edition) was done by using a linear array transducer of frequency 8-13 MHz. Coupling gel was applied over the transducer and probe was placed gently over the corneal surface perpendicular to the centre of the cornea (vertical plane, Fig 1). Ocular echobiometric measurements were recorded in the vertical plane image. After the procedure excess coupling gel was wiped off with cotton, and the eye was rinsed with normal saline.

Diverse ocular echobiometric parameters measured in both left and right eyes of all the camels were - anterior chamber depth (ACD), lens thickness (LT), vitreous chamber depth (VCD) and Axial length (AL). Statistical analysis, student’s t test was used for comparing the left and right eyes and between male and female camels under the study.

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**ECHOBIOMETRY OF EYES OF DROMEDARY CAMELS (Camelus dromedarius)**

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**ABSTRACT**

Transcorneal ultrasonographic scanning of 12 adult healthy camels of both sex were performed using linear array transducer on B-mode. The ultrasonographic appearance of the eye was described and ocular dimensions were recorded. The echo-biometric studies on four parameters i.e. anterior chamber depth (ACD), lens thickness (LT), vitreous chamber depth (VCD) and axial length (AL) were recorded. The ultrasonography showed that the eyes of camels were appeared as slightly ovoid structures with anechoic contents such as anterior chamber, vitreous chamber and lens. The cornea, anterior and posterior lens capsule, iris, granula iridica/corpora nigra and sclera-retinal rim appeared as hyperechoic. Non-significant differences were found in all parameters when compared between right and left eyes of male and female camels. However, the anterior chamber depth in male camels were significantly higher than female camels P ≤ 0.05. The present study provides echo-morphometric view of the intra-ocular structure in adult healthy eyes of camels.

**Key words:** Camel eye, Echobiometry, Ultrasonography