

## Evaluation of Prevalence of the Types of Thyroid Disorders Using Ultrasound and Pathology of One-Humped Camel in Iran: *Camelus dromedarius*

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**Abstract :** The thyroid gland is the largest classic endocrine organ that effects many organs of the body and plays a significant role in the process of Metabolism in animals. The aim of this study was to investigate the prevalence of thyroid disorders diagnosed by ultrasound and microscopic Lesions of the thyroid during the slaughter of apparently healthy One Humped Camels (*Camelus dromedarius*) in Iran. Randomly, 520 male camels (With an age range of 4 to 8 years), were studied in 2012 to 2013. The Camels' thyroid glands were evaluated by sonographic examination. In both longitudinal and transverse view and then tissue sections were provide and stained with H & E and finally examined by light microscopy. The results obtained indicated the following: hyperplastic goiter (21%), degenerative changes (12%), follicular cysts (8%), follicular atrophy (4%), nodular hyperplasia (3%), adenoma (1%), carcinoma (1%) and simple goiter colloid (1%). Ultrasound evaluation of thyroid gland in adenoma and carcinoma showed enlargement and irregular of the gland, decreased echogenicity, and the heterogeneous thyroid parenchyma. Also, in follicular cysts were observed in the enlarged gland with no echo structures of different sizes and decreased echogenicity as a local or general. In nodular hyperplasia, increase echogenicity and heterogeneous parenchymal were seen. These findings suggest the use of Ultrasound as a screening test in the diagnosis of complications of thyroid disorders. Pathology also to be used for the diagnosis of thyroid problems and other side effects.

**Keywords :** thyroid gland, one humped camel, sonography, pathology

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