

## Left thoracic duct in donkey

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Thoracic duct is a duct that drains the lymph from the cisterna chyli into the venous angle of the cranial vena cava. The thoracic duct in the horse is situated on the right side (Getty 1975; Nickle et al. 1981), but in rare cases the thoracic duct has been reported (Nickle et al. 1981; Gilanpour et al. 2005).

In this case the course and position of the thoracic duct in donkey seems to be similar to the horse. In this case the thoracic duct originated from the cisterna chyli passed through the aortic hiatus of the diaphragm and enters to the thoracic cavity. It was situated on left of the median plane on the dorsal aspect of aorta. The thoracic duct was totally on the left side in its course. At the level of fifth thoracic vertebra it inclines ventrally to the left of esophagus. Finally it entered in to the origin of the cranial vena cava at the jugular venous angle. Regarding the anatomical similarity of equine it seems that existence of left thoracic duct in donkeys maybe considered as a rare case.

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Nickle R, Schummer A, Seifrele E (1981) The circulatory system, the skin, and the cutaneous organs of the domestic Mammals. Verlag Paul Parey, Berlin. Hamburg. Vol.3, pp. 322-323, 330-331, 438.

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## A comparison of the *in vitro* effect on *Bulbine frutescens* and *natalensis* on dermal fibroblasts and epidermal keratinocytes: implications for wound healing

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In recent years, there has been a growing interest in natural and traditional medicines for the treatment of wounds. The use of such medicinal plant extracts has arguably been based largely on historical or anecdotal evidence, since there is relatively little scientific data supporting these claims. Attempts to find agents that promote wound-healing and that are affordable, effective and non-toxic have a long history. In South Africa, hundreds of different indigenous plants are used to treat wounds and burns. The merits of relatively few of these have been scientifically evaluated. One plant, indigenous to only southern Africa and widely used as a skin remedy is *Bulbine* of the Asphodelaceae family van Wyk and Gericke (2000). The leaf of this plant are filled with a clear gel similar in appearance and consistency to the *Aloe vera* gel. The gel of several species of *Bulbine* is commonly used by both traditional healers and the local population for the treatment of wounds, burns, rashes, itches, ringworm, cracked lips and herpes, and is applied directly to the skin or used in the form of a warm poultice (Hutchings et al. 1996). This study aimed to investigate the effect of *Bulbine frutescens* and *Bulbine natalensis* on normal human dermal fibroblasts and keratinocytes. – two cell types that are integral to the wound healing process in skin: keratinocytes contribute to wound closure by proliferating and epithelializing the wound area (Xue et al. 2004) while fibroblasts stimulate collagen production resulting in wound contraction.

Both cell lines were cultured under standard conditions using Iscove's Modified Eagles Medium (MEM) for the fibroblasts and Dulbecco's MEM for the keratinocytes. Cells were seeded into 96 well plates and once confluent, were treated with vary-