# THE LYMPH FLOW FROM THE SKIN OF THE DISTAL AREA OF THE ANTERIOR LEG OF THE KARAKUL SHEEP

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The growth of diverse livestock industries is critical in order to meet the demand for livestock products among our sovereign republic's population.

President of the Republic of Uzbekistan Decree PD-4947 of February 7, 2017 "On the action strategy for the Republic of Uzbekistan's five priority areas of growth in 2017-2021," PD-4243 of March 18, 2019 "On measures to promote the livestock sector's future development" The Republic pays attention to the development of work in the field of veterinary medicine and animal husbandry, as evidenced by Resolution No. PD-5696 of March 28, 2019 "On measures to radically improve the system of public administration in the field of veterinary medicine and animal husbandry."

The President of the Republic of Uzbekistan's Resolution No 4576, dated January 29, 2020, "On additional measures of state support for the livestock sector," calls for the livestock sector's rapid development, the introduction of modern and innovative methods, and an increase in the volume and variety of products held. For the development of livestock and its branches, the Republic of Uzbekistan established the State Committee for Veterinary and Livestock Development, the Ministry of Agriculture, the Ministry of Economy and Industry, the Poultry Industry Association, the Uzbekbaliqsanoat "Association, the Republican Association" Karakulchilik.

We employed an intramuscular and direct injection of a contrast agent consisting of an aqueous solution of black mulberry and a 10-15 percent solution to locate lymphatic

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arteries in the skin of the distal portion of the forefoot of Karakul sheep. Figure 2 shows that when a contrast agent is injected in a checkerboard pattern, the puncture points are spaced 1.5–2 sm apart, allowing for the detection of a significant number of lymphatic capillaries. We split the studied area into four sections to make anatomical and topographic recording of the identified lymphatic veins easier: finger-palm area, bracelet area, wrist area, and elbow area. 1. Lymphatic drainage from the skin of the fingers and palms is limited by the following area: the lower border passes through the horizontal surface of the hoof, the upper border - through a horizontal line passing through the proximal epiphysis of the proximal metaphysis of the proximal epiphysis of the proximal epiphysis of the palmar bone.

6-8 tiny lymphatic veins originate from the epidermis of the hoof wall and the outer surface of the hoof, uniting to create 2-4 trunk vessels on the round bone. The dorsal surface of the finger receives 1-2 of them, whereas the lateral (medial) finger receives the remaining 1-2.

Lymphatic vessels are implanted in the lymphatic collector along the first path, which leads to the IV lateral (III -medial) palmar artery and vein of the finger. Lymphatic vessels are placed in the lysate collector along the second pathway, leading to the common dorsal artery and vein of the finger.

After the hoof bone unites to form 2-3 branching lymphatic vessels flowing along the blood vessels, 4-6 little lymphatic vessels protrude to the outside of it from the surface of the base of the hoof skin of the round bone and from the wall of the finger. The second dorsal artery and vein from the outer surface about the second finger joint are placed in the lymphatic collector and are directed proximally. 2-3 lymphatic vessels emerge from the skin of the hoof and are directed to the dorsal and latero-palmar. In the area of the second finger joint, a common dorsal and IV lateral (III medial palmar palmar artery and vein of the finger are placed along the main lymphatic vessel and collectors).

Extraorganic lymphatic vessels create 2-4 lymph nodes near the base of the second finger's hoof skin, with 1-2 branching lymph vessels implicated in each node's creation. The lymphatic veins that emerge from the interconnected and directed to the proximal side of the hoof bone and wall, where they are found between the skin base and the dance floor. The remaining 1-2 lymph vessels go to the proximal side and enter the lymph collector along

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the third dorsal artery and vein of the finger about the proximal epiphysis of the pelvis, while the remaining 1-2 lymph vessels go to the distal side and enter the lymph collector along the third dorsal artery and vein of the finger about the proximal epiphysis of the pelvis.

The lymph goes to the compartment's superficial lymph node. The lymphatic system of the third finger's base of skin on the hoof palm is distinct from that of the fourth finger, where it has evolved in tandem. 3-5 branched lymphatic vessels emerge from the formed lymph node. 2-3 of them are in the proximal direction, reaching to the middle of the occipital bone, and they join and go in the dorsal direction.

The remaining 1-2 lymphatic vessels are palmar-directed, joining lymphatic vessels from the hoof lobe at the center of the occipital bone, and the resulting trunk veins are proximally directed.

The lymphatic vessels pierce the deep fascia on the middle portion of the occipital bone and are introduced into the lymphatic collectors along the palmar arteries and veins of the fingers. The lymph moves to the axillary lymph node in such circumstances.

From the skin of the lateral cleft of the phalanges II and I, 5-7 little lymphatic vessels emerge, which unite to form 2-4 large lymphatic vessels. 1-2 of them pass down the dorsal artery and vein of the fingers to the dorsal surface and then to the larger proximal. The other 1-2 are directed to the plantar surface, where they penetrate the fascia and are placed in the lymphatic collector that runs along this lateral palmar artery and vein of the fingers. 6-8 small lymphatic vessels emerge from the medial surface of the phalanges II and I, and they join together to form 3-4 main vessels. 2-3 of them are directed to the dorsal surface of the fingers, then to the greater, along the dorsal artery and vein of the fingers. The remaining 1-2 are directed to the palmar surface, where they penetrate the fascia and are placed in the lymphatic collector running along the III medial palmar artery and veins.

6-8 little extraorganic lymphatic vessels develop from the skin of the palmar surface of the phalanges II and I, forming 3-4 branching vessels directed to the latero-medial surface and being positioned on this surface and lymphatic vessels. The lymphatic vessels in the rudimentary area of the fingers unite to produce 2-3 primary lymphatic vessels that flow independently of the proximal without passing through blood vessels. 2-3 lymphatic arteries come from the skin of the interdental gap and are positioned proximally on the dorsal

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aspect of the humerus, then on the dorsal side of the palmar bone, leading to the primary lymphatic collector that runs along the common dorsal artery and veins. The fluid then goes to the clean lymph node in the neck.

Thus, the lymphatic system of the astrakhan sheep's fingers is anatomically and topographically complicated, and it is thought to be dependent on the astrakhan sheep's living conditions in various ecological zones of the republic. Because the distal region of the foot bears the brunt of the weight, the toe area has a complicated angiological (arterial, venous, and lymphatic structure). The lymph from the fingers moves through the clean and deep lymphatic veins to the surface of the neck and axillary lymph nodes, according to the data acquired.

5-7 small lymphatic vessels emerge from the Karakul sheep's skin on the lateral surface of the palmar area and join to form 3-5 branched lymphatic vessels, 1-2 of which are directed to the dorsal surface, where they connect with lymphatic vessels from the finger area, and the other 2- 3 are directed proximal to the wrist joint area.

6-8 tiny lymphatic vessels arise from the skin of the palmar area's medial surface, which link together to produce 3-6 branched lymphatic vessels. Two to three of them are sent to the medio-dorsal side, where they combine with lymphatic veins from the fingers and the lateral surface. The remaining 1–3 lymphatic vessels are oriented proximal to the wrist joint area. The lymph goes to the neck's surface lymph node.

8-10 small lymphatic vessels originate from the palmar surface of the palm, 4-5 of which are directed to the lateral surface and saturate the lymphatic vessels in this area, and the other 4-5 are directed to the medial surface and inserted in the lymphatic vessels in this area. Lymph travels to the neck's surface lymph node.

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