

The transverse cervical vein follows a similar course to the thyrocervical trunk and its tributaries and collects blood from the muscles at the root of the neck and scapula.

It has deep and superficial branches, known as the dorsal scapular and the superficial cervical veins, respectively. The dorsal scapular branch passes deep to levator scapulae and the rhomboideus major and minor muscles to reach the lateral border of levator scapulae. The superficial cervical vein arises within trapezius and then descends anteriorly across the floor of the posterior triangle anterior to the phrenic nerve and scalenus anterior. The deep and superficial branches join into a single branch, which passes laterally and anteriorly over the brachial plexus where it eventually drains into the external jugular vein .