Palmaris longus is a slender and fusiform muscle lying medial to flexor carpi radialis. It is often described as one of the most variable muscles in the human body and phylogenetically classified as a retrogressive muscle. It is widely agreed that the palmaris longus tendon is the first choice as a donor tendon, because it meets the necessary requirements of length, diameter and availability, and can be used without causing any functional deformity. Fifty-eight spontaneously aborted human fetuses (26 female, 32 male, 116 upper extremities) were studied. The presence or absence of the palmaris longus was determined. The lengths of the belly and tendon were measured, and belly/tendon length ratio was calculated. Correlation with gestational age, body side and gender were studied. The muscle was absent in 44 forearms (37.93%; 20 right side, 34.48%; 24 left side, 41.38%); being bilateral in 19 of 58 fetuses (32.76%) and unilateral in 6 (10.34%). The unilateral absence rate was higher on the left side with a statistically significant difference. The absence of palmaris longus was more common in females, and the difference was statistically significant. The belly/tendon length ratio was 1.04 ± 0.35 on the right side and 1.09 ± 0.3 on the left. It did not show any difference according the fetal age. In our study, bilateral absence was more common than unilateral absence; this is comparable with the earlier studies. During the development the belly/tendon length ratio is maintained.

**Keywords:** Palmaris longus, absence, variation, morphometry, belly/tendon length ratio