

## **Relation of Palmaris Longus agenesis with laterality of hand.**

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### **Introduction**

Palmaris longus is a small vestigial muscle present in the flexor compartment of forearm and shows greater variability. Palmaris longus tendon graft has a growing interest in constructive surgeries. However, Palmaris longus agenesis is seen among different ethnic groups in different countries and the prevalence of absence varies from 4% to 63.9%. It shows variation with laterality of the hand as well.

### **Methods**

This study included 515 subjects of both sexes belonging to 18-26 years. Initially they were asked to perform the standard test (Schaffer's Test) to assess the presence of Palmaris longus tendon. Subsequently, other four test (Thompson's test, Mishra's test I, Mishra's test II, Pushpakumar's test) were done to confirm the absence of the tendon of Palmaris longus muscle.

### **Results**

The collected data were analyzed by chi-square test using SPSS software. Agenesis of Palmaris longus was exhibited by 13.4% of the subjects. Among them bilateral agenesis was

higher (8.5%) than unilateral whereas left hand agenesis was reported more (4.9%) than right hand (3.5%). Right and left hand agenesis were showed to have a statistically significant ( $p=0.000$ ) and greater association ( $V=0.625$ ).

### **Discussion and Conclusions**

Palmaris longus agenesis occurs as unilateral or bilateral. Our findings suggest that bilateral agenesis of Palmaris longus is more common and it shows higher association between right and left side agenesis. Furthermore, unilateral absence occurs more frequently on the left side than right.