

## **Prevalence of absence of Palmaris Longus and its association with gender, hand dominance and absence of FDS tendon to little finger among Malay population**

### **ABSTRACT**

Background: Palmaris Longus is being widely used in reconstructive, plastic and cosmetic surgeries due to its long tendon. It is the most readily available source for tendon grafting. The objective of this study was to determine the prevalence of absence of Palmaris Longus and its association with gender, hand dominance and absence of FDS (flexor digitorum superficialis) tendon to little finger among Malay population. Methods: An analytical cross sectional study design was used and a self-administered proforma was distributed for data collection. 1239 Malay secondary school children in Putrajaya were tested for absence of Palmaris Longus using Schaffer's test. 4 additional tests namely Thompson's test, Mishra's test I, Mishra's test II and Pushpakumar's 'two-finger sign' method were used to confirm its absence in respondents with negative Schaffer's test. Function of Flexor Digitorum Superficialis tendon to little finger was determined by flexing PIP of little finger while hyperextend the other fingers. Results: The prevalence of absence of Palmaris Longus was 11.7%. Left side absence of Palmaris Longus was much common. There was a significant association between absence of Palmaris Longus with gender in which female had higher prevalence of absence of Palmaris Longus than male. Conclusions: In conclusion, the prevalence of absence of Palmaris Longus in Malay population was lower than Indian but higher than Chinese population. Females had higher prevalence of absence of Palmaris Longus and no association can be found with hand dominance and absence of Flexor Digitorum Superficialis tendon to little finger.

**Keyword:** Palmaris Longus; Gender; Hand dominance; Flexor digitorum superficialis; Malay