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## Thickness and width of the menisci of adult knee joint, a cadaveric study

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### Abstract

**Background:** The goal was to determine the thickness and width of the knee joint meniscus at their different regions. The objective was to compare the dimensions at these regions and over the right and left sided specimens.

**Methods:** The present study included 50 adult cadaveric knee joints and 100 menisci (50 medial menisci and 50 lateral menisci) were studied. The meniscus was distributed into anterior, middle and posterior parts. Thickness and width at the mid-point of these three parts were determined by using the Vernier caliper.

**Results:** The breadth of the medial meniscus was  $8.38 \pm 1.64$  mm,  $7.68 \pm 1.92$  mm and  $13.93 \pm 2.69$  mm at the anterior, middle and posterior one third regions. Same measurements for the lateral menisci at these regions were  $9.84 \pm 1.78$  mm,  $8.82 \pm 2.01$  mm and  $10.18 \pm 2.23$  mm respectively. The thickness of the medial meniscus was  $4.49 \pm 0.78$  mm,  $4.07 \pm 0.81$  mm and  $4.79 \pm 0.93$  mm at these regions. The lateral meniscus thickness was  $3.82 \pm 0.69$  mm,  $4.43 \pm 0.98$  mm and  $4.36 \pm 0.8$  mm respectively.

**Conclusions:** It is believed that this data is enlightening to the arthroscopic surgeon during the meniscus transplantation either by using synthetic material or allograft as the proper sizing of the meniscus is important to prevent the complications due to the inaccurate sizing.

**Keywords:** *allografts, arthroscopic meniscectomy, tibial meniscus, transplants*