

**Thesis Title**            Comparison between Corpus Callosum of Thai Males  
and Females by Using Plastinated Brain Slices

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**ABSTRACT**

Sexual dimorphism has been reported in human corpus callosum. Most lines of evidence suggest that female corpus callosum is larger than that of the male. This study was aimed at determining if such dimorphism exists in Thai subjects. And because of the advantage of plastination technique, brain slices prepared by the technique was suitable for morphometry of the corpus callosum. Brains from 9 male and 8 female cadavers, 40 to 49 years of age were used. Plastinated brain slices were prepared according to P-40 technique as recommended by Biodur Company, Heidelberg, Germany. Both linear and area parameters of the corpus callosum were measured in the brain after mid-sagittal sectioning. The area parameters were accomplished by a computerized program, Adobe Photoshop. The results revealed that the size of the corpus callosum of Thai females did not differ from that of the males. The shape, however, was slightly different. The female corpus callosum was larger in the anterior mid-body but smaller in the isthmus and splenium, compared to the male counterparts.