

Thesis Title	Sexual Dimorphism of the Corpus Callosum in Thai Subjects : The Study by Stained and Plastinated Brain Slices
Name	Pisit Poltana
Degree	Master of Science (Anatomy)
Thesis Supervisory Committee	Boonsirm Withyachumnarnkul, M.D., Ph.D. Reon Somana, M.D., Ph.D. Sanjai Saengvichien, M.D., Ph.D.
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## ABSTRACT

The morphological difference between male and female corpus callosum, in term of total or partial cross sectional areas, have been reported with controversy. While some investigators showed the presence of sexual dimorphism of this structure, other reported otherwise. The gross morphologic studies of the corpus callosum have had the merit of calling attention to questions which were fundamental for

understanding of structural-functional relations in the human brain. During the past years, the assumption could be drawn that the splenium of the corpus callosum in the female brain is significantly larger in size and more bulbous than that in the male. The present study was to perform morphometry of the corpus callosum. Sixteen brains, eight from the male and eight from the female autopsied cases, were used for measured area parameter of the coronal corpus callosum. Another identical set was used for both linear and area parameters in sagittal section. The area parameters were determined by a scanner and software program "Adobe Photoshop". In sagittal plane, the rostrum of the corpus callosum of the male was slightly larger than that of the female, while the rostral body, the isthmus and the splenium were somewhat larger in the female. In the coronal plane, the area of the male corpus callosum tended to be larger than that of the female. However, these differences were not difference level. It is concluded that no sexual dimorphism of the corpus callosum was obvious in Thai subjects.