Cross-species and intraspecies morphometric analysis of the corpus callosum

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A cross-species morphometric study of the corpus callosum was performed in the rat, rabbit, cat, dog, horse, cow and human. Across species, the results indicate a strong, although less than linear, dependency of callosal size on brain weight. This relation tends to lose significance within species. This is consistent with other morphometric studies indicating a tendency to decrease the correlations between morphometric variables in within-species analyses as compared to between-species analyses. There are species differences in the relative size of some callosal segments particularly in the posterior third, which is larger in frontally-looking species than in laterally-looking species. No sex differences in callosal size were detected in any of the species examined. These findings are discussed in the light of possible developmental and functional correlates of the variability observed. Copyright (C) 2000 S. Karger AG, Basel.