

Thesis Title	Microvascularization of Large Intestine in Common Tree Shrew (<i>Tupaia glis</i>) as Revealed by Corrosion Cast Technique in Conjunction with SEM
Name	Peeraya Waraklang
Degree	Master of Science (Anatomy)
Thesis Supervisory Committee	Reon Somana, M.D., Ph.D. Boonsirm Withyachumnarnkul, M.D., Ph.D. Panjit Chunhabundit, Ph.D.
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Abstract

Large intestine from 12 adult common tree shrews (*Tupaia glis*) of both sexes were prepared for the study with light microscopy (LM), conventional scanning electron microscopy (SEM) and with corrosion cast/SEM. It is found that the tree shrew large intestine is straight of approximately 7-8.5 cm. long with longitudinal mucosal folds, regular distribution of the intestinal gland openings and with complete outer longitudinal muscle. The blood supply of the large intestine is from three sources: the branches of superior mesenteric, inferior mesenteric and of internal iliac arteries supplying its proximal one-third, distal two-thirds and the rectum, respectively. The branches of mesenteric arteries join together to form the mesenteric arches running along the long axis of the large intestine in the mesentery. The arteries further give off many branches called vasa recta entering the organ. Upon reaching the intestine, they send off branches to supply left and right sides of the intestine. These branches give off small and large branches. The small branches break up into serosal plexus supplying the serosa and outer longitudinal muscle. Their large branches penetrate the muscular coat and supply it before becoming the submucosal plexus which gives off arterioles breaking into capillary networks surrounding colic glands appearing as honeycomb when viewing from the luminal side. The capillaries beneath the glands

collect the blood into venules before joining the submucosal veins which pass through the muscular coat accompanying the arterial branches and finally drain into the portal vein.