

192. **Ultrastructural Changes In The Colonic Microvasculature Of Monkeys Infected With Shiga Toxin Producing E.COLI (STEC) O157: H7 Strain 84-01:**

Ms. Sakunthaladevi, Ambikaipakan, Nachiket Shankar, Gagandeep Kang And Rachel Koshi, Christian

HISTOLOGY



Medical College, Vellore, Tamil Nadu.

Shiga toxin producing *E.coli* (STEC) are responsible for causing haemorrhagic colitis. The aim of the study was to identify the ultrastructural changes in colonic microvasculature of monkeys infected with STEC. Tissue samples were taken from ascending colon, mid colon and descending colon of 2 monkeys each sacrificed at 6 and 24 hours postinfection(PI); and one control. The samples were processed for electron microscopy and all blood vessels in the mucosa and submucosa were studied. Prominent ultrastructural changes of endothelial swelling, membrane ruffling, organelle dilatation and vacuolation were seen in the microvasculature of infected monkeys. In addition, changes in blood cells and evidence of alteration in blood flow were also noted. Capillaries and venules were most severely affected. Changes were more prominent at 24 hrs PI than in 6 hrs PI.