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The Effect of Aging on the Serum Biochemistry of Rats with a 50% Distal Small Bowel Resection

Norihiko ASADA , Akifumi ONO, Yoshinobu MATSUMOTO
and Tetsuro MORITA

Department of Clinical Nutrition Faculty of Medical Professions Kurashiki, 701-0194, Japan

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Abstract

The effect of resecting 50% of the distal small intestine on longevity and serum biochemistry was studied in rats. Male Sprague-Dawley rats were divided into two groups. One group underwent a 50% distal small bowel resection (SBR) and the other was kept as controls. The rats were anesthetized with ether and blood was withdrawn from the tail vein prior to the operation and 4, 12, 24, 36, 48, 60 and 72 weeks postoperatively. At 48 weeks after the operation, serum total protein and albumin levels were significantly lower in the SBR rats. Creatinine was significantly lower in the SBR rats at 4, 12, and 48 weeks after the operation when compared to normal rats. Finally, the present study showed that the life span was longer after small bowel resection, but the reasons for this finding are unclear.
