



Acute blood glucose fluctuation delayed wound healing in rats

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Abstract

The study of blood glucose fluctuation has become one of the hot spots in the prevention and treatment of diabetes and its complications in recent years. It has been shown that chronic hyperglycemia can lead to delayed wound healing, while there are few studies on the effects of acute hyperglycemia and acute fluctuating hyperglycemia on wound healing. In the stress state of burn, acute trauma, perioperative period and severe infection, acute fluctuating hyperglycemia and wound healing often occur at the same time. Methods: After depilating and disinfecting the back of rats, a wound of about 1.0cm × 1.0cm × 0.1cm was established. The model of acute blood glucose fluctuation was established by intravenous infusion of glucose and insulin 48 hours after the wound. The rats were photographed 21 days after the wound was created. The area of the wound was assessed by northern eclipse v7.0 software (Empire imaging, Mississauga, Ontario). Results: Compared with the rats in the acute persistent hyperglycemia group, the wound area of the rats in the acute volatile hyperglycemia group was larger. Conclusion: Acute blood glucose fluctuation delayed wound healing in rats.

Biography

Na Wu has completed her PhD at the age of 32 years from China Medical University, China. She is the Deputy Chief Physician of Endocrinology, doctor of medicine, associate professor, postgraduate supervisor of China Medical University, visiting scholar of Temple University. She presided over one project of National Natural Science Foundation and one project of Liaoning Provincial Department of education. He has published more than 20 papers.