

## Evaluation of the Usefulness of Skin Blood Flow Measurements by Laser Speckle Flowgraphy in Pressure-Induced Ischemic Wounds in Rats

<b>Publons ID</b>	(not set)
<b>Wos ID</b>	WOS:000275061800021
<b>Doi</b>	10.1097/SAP.0b013e3181a73078
<b>Title</b>	Evaluation of the Usefulness of Skin Blood Flow Measurements by Laser Speckle Flowgraphy in Pressure-Induced Ischemic Wounds in Rats
<b>First Author</b>	
<b>Last Author</b>	
<b>Authors</b>	Nakagami, G; Sari, Y; Nagase, T; Iizaka, S; Ohta, Y; Sanada, H;
<b>Publish Date</b>	MAR 2010
<b>Journal Name</b>	ANNALS OF PLASTIC SURGERY
<b>Citation</b>	17
<b>Abstract</b>	Assessment of blood circulation in pressure ulcers can be beneficial for predicting the severity of tissue damage and making the prognosis. Here, we evaluated the usefulness of laser speckle flowgraphy (LSFG) for assessing skin blood flow in pressure-induced ischemic wounds in rats in comparison with skin temperature measurements by thermography, which is commonly used in clinical settings. The blood flow was assessed in 3 groups (control, 1 kg loading, and 10 kg loading for 3 hours), before, immediately after, and on days 1, 2, and 3 after loading. The 10 kg loading induced more severe tissue damage but did not show any distinguishable gross manifestations immediately after releasing the indenter. LSFG detected a significantly reduced blood flow velocity after 10 kg loading compared with 1 kg loading, whereas thermography did not. These results indicate the usefulness of LSFG measurements for assessing tissue circulation in an early phase after tissue damage onset.
<b>Publish Type</b>	Journal
<b>Publish Year</b>	2010
<b>Page Begin</b>	351
<b>Page End</b>	354
<b>Issn</b>	0148-7043
<b>Eissn</b>	1536-3708
<b>Url</b>	<a href="https://www.webofscience.com/wos/woscc/full-record/WOS:000275061800021">https://www.webofscience.com/wos/woscc/full-record/WOS:000275061800021</a>
<b>Author</b>	Ners YUNITA SARI, Ph.D