

Accepted Manuscript

New perspective on the in vivo use of cold stress dynamic thermography in integumental reconstruction with the use of skin-muscle flaps

Szymon Kolacz, Mateusz Moderhak, Jerzy Jankau



PII: S0022-4804(16)30572-8

DOI: [10.1016/j.jss.2016.12.022](https://doi.org/10.1016/j.jss.2016.12.022)

Reference: YJSRE 14105

To appear in: *Journal of Surgical Research*

Received Date: 6 January 2016

Revised Date: 29 August 2016

Accepted Date: 21 December 2016

Please cite this article as: Kolacz S, Moderhak M, Jankau J, New perspective on the in vivo use of cold stress dynamic thermography in integumental reconstruction with the use of skin-muscle flaps, *Journal of Surgical Research* (2017), doi: 10.1016/j.jss.2016.12.022.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

New perspective on the in vivo use of cold stress dynamic thermography in integumental reconstruction with the use of skin-muscle flaps.

New perspective on thermography in reconstructions with TRAM flaps

Szymon Kolacz^a

^aDepartment of Plastic Surgery, Medical University of Gdansk

Smoluchowskiego 17, 80-214 Gdansk, Poland

Corresponding author: skolacz@gmail.com phone: 0048 600 958 976

Mateusz Moderhak^b

^bDepartment of Biomedical Engineering, Gdansk University of Technology, Poland

11/12 G. Narutowicza St. | 80-233 Gdańsk | Poland

Jerzy Jankau^a

^aDepartment of Plastic Surgery, Medical University of Gdansk

Smoluchowskiego 17, 80-214 Gdansk, Poland

Study conception and design: Szymon Kolacz, Mateusz Moderhak, Jerzy Jankau

Acquisition of data: Szymon Kolacz, Jerzy Jankau

Analysis and interpretation of data: Szymon Kolacz, Mateusz Moderhak

Drafting of manuscript: Szymon Kolacz

Critical revision: Szymon Kolacz, Mateusz Moderhak, Jerzy Jankau

All authors declare that do not have any financial and personal relationships with other people or organizations that could potentially and inappropriately influence work and conclusions.

Abstract 250 words

Background

Among the problems encountered by plastic surgeons is the reconstruction of defects following tumors. One of the reconstructive options is TRAM flap. Despite that anatomy is well-explored, marginal flap necrosis may develop. To minimize complications imaging examinations was designed to determine the degree of flap perfusion. One of them is the thermographic examination.

Materials and methods

We examined 38 patients who had undergone 10 reconstructive breast surgeries with a pedicled TRAM IPSI flap, 10 patients with a TRAM CONTRA flap and 18 patients with a TRAM Supercharged flap.

Each operated patient underwent a thermographic examination before the surgery, after the dissection of the skin-muscle flap, immediately after suturing flap and during the 1st and 7th day after the surgery. The collected data were then processed to yield results in a numerical form and compared with clinical examination.

Download English Version:

<https://daneshyari.com/en/article/5734203>

Download Persian Version:

<https://daneshyari.com/article/5734203>

[Daneshyari.com](https://daneshyari.com)