



UNIVERSITY OF MALTA
FACULTY OF MEDICINE & SURGERY
Pharmacy Department
2004 Final Project Previews

Monique Mangion

Evaluation of an enzyme extracted from fish for topical
use in the treatment of pressure sores
Monique Mangion

Background

PENZIM 500 gel is a skin preparation manufactured by Zymetech of Iceland. 1

Objective

To assess the clinical efficacy and cost-effectiveness of PENZIM 500 gel in the treatment of pressure sores.

Design

A clinical study over a maximum of 25 weeks involving 50 wounds was carried out. The wounds were divided into two equal groups, A and B. Group A patients were treated with PENZIM 500 gel while conventional treatment was used for Group B. The clinical efficacy of the products in the two groups was assessed. Statistical analysis was carried out using Excel. The t-test was carried out for the comparative study.

Setting

St Vincent de Paule Residence

Main outcome measures

Pressure sore colour and volume; treatment cost for Penzim 500 gel and for other products.

Results

The mean width of the pressure sores in Group A was significantly smaller than that of Group B in the final weeks of the study according to the Mann-Whitney test (p value ranging from 0.0221 to 0.0454). The same trend was seen with regards to mean length but the difference was not significant. The mean depth of the pressure sores in group A was found to be significantly higher than that of Group B (p value ranging from 0.0013 to 0.0386). The wound colour appeared to be significantly better for PENZIM 500 gel for various weeks (p value ranging from 0.0180 to 0.0411).

Conclusion

PENZIM 500 gel was found to be significantly more effective than conventional treatment.

References

1. Gudmundsdóttir A, Gudmundsdóttir E, Óskarsson S, Bjarnason J.B, Eakin A, Craik C.S. Isolation and characterization of cDNAs from Atlantic cod encoding two different forms of trypsinogen. Eur. J. Biochem 1993;217:1091-1097.

Last Updated: 27 January 2005 by Eric Santucci: <http://home.um.edu.mt/phcy/2004.htm>