

ECONOMIC ANALYSIS OF THE EFFECTIVENESS OF A BIOACTIVE ANTIOXIDANT DRESSING IN CHRONIC WOUNDS

INTRODUCTION

Economic analysis in health care should be part of the usual practice. The effectiveness of treatments applied to patients with chronic wounds and the benefits and costs are an important aspect in the management of the healing process and one of the greatest difficulties for health professionals during the treatment of wounds. This was the reason to perform an economic analysis comparing different treatments with a new innovative active dressing with antioxidant properties.

OBJETIVES

To evaluate the effectiveness, measuring cost versus benefit, of new bioactive dressing with antioxidant properties that promotes the natural process of wound healing in comparison to conventional previous treatments.

AUTHORS

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PATIENTS, MATERIALS & METHODS

Experimental study. 10 patients that belong to the South of Spain Health District. Data was collected between April 2017 and July 2018. All patients whose treatment cost could be estimated from their clinical histories were included in the study. Those patients where costs could not be estimated were excluded. These results, therefore, are a conceptual sample, as all the cases that met the requirements have been included. Analyzed variables were: diagnosis of the lesion, time of evolution in months, disposable materials, wound dressings, antibiotics, ambulance costs, medical hour cost of primary care, cost of hospital physician, cost of nursing. Mean scores, percentages, standard deviations and sample correlation were calculated.

RESULTS

It must be highlighted that the difference in terms of average reduction in healing time in the ten analyzed patients was 7.73 months. It was significant that the total cost of the ten analyzed patients with conventional treatments was € 18,341.67 while the total cost of the same ten analyzed patients with Reoxcare treatment was € 3,445.77, the difference being € 14,926.58 for ten patients .

	Conventional treatment Reoxcare treatment	Conventional treatment Reoxcare treatment	Conventional treatment Reoxcare treatment	Conventional treatment Reoxcare treatment
	AVERAGE	STANDARD DEVIATION	AVERAGE DIFFERENCE	SIGNIFICANCE
TIME IN EVOLUTION	9.31 Months 1.57 Months	10.05 0.86	7.73 Months	0.028
DISPOSABLE MATERIALS	186.42€ 51.10€	337.32€ 86.32€	135.31€	0.127 (NS)
WOUND DRESSINGS	519.20€ 84.69€	628.16€ 136.96€	434.51€	0.029
ANTIBIOTICS	33.76€ 23.47€	39.15€ 44.58€	10.28€	0.359 (NS)
AMBULANCE	102.50€ 17.50€	275.49€ 55.33€	85.00€	0.255 (NS)
PRIMARY CARE MEDICAL HOUR	44.69€ 5.27€	44.62€ 11.12€	39.40€	0.007
HOSPITAL MEDICAL HOUR	32.97€ 5.78€	25.05€ 10.54€	27.19€	0.002
NURSE HOUR	914.61€ 130.45€	1148.69€ 90.51€	784.15€	0.053 (NS)
REOXCARE	0€ 39.75€	0€ 26,25€	-39.75€	0.001
TOTAL COST	1834.16€ 334.57€	2121.97€ 309.71€	1489.59€	0.031



CONCLUSIONS

The use of the bioactive dressing with antioxidant properties promotes the healing process, considerably reducing healing time and being a very effective treatment from the cost-benefit perspective.

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