RESPIRATORY REHABILITATION PROTOCOL FOR PATIENTS WITH COMPLEX BURN INJURIES

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INTRODUCTION

Patients with complex burn injuries require interdisciplinary rehabilitation to maximize their functional recovery.

Burn-injury patients:

- Smoke inhalation/airway burn → OTI/tracheostomy.
 - Possible affected thorax → Thoracic expansion alteration
- It is important to study the respiratory function and to be able to offer a respiratory physiotherapy program.

The management of the burned patient is done in specialized centers, with specific rehabilitation protocols designed to work on different areas, including the respiratory system.

OBJECTIVE

The aim of this study is to create a respiratory rehabilitation protocol for the burned patient.

MATERIAL AND METHODS

A bibliographic search was carried out.
A group of experts from the interdisciplinary rehabilitation team was formed to create a protocol, consisting of:

- Burning specialized physiatrist
- Respiratory specialized physiatrist
- Burn physiotherapist
- Respiratory physiotherapist

The protocol was presented to the multidisciplinary team and started to be used systematically.

RESULTS

- Acute phase → patients are evaluated by the rehabilitation physician of the burn unit. The usual protocol begins with exercises of respiratory physiotherapy, to improve ventilatory mechanics from weaning to patients without respiratory support
- Subacute phase → study the respiratory function, the respiratory muscle strength and the functional capacity. The rehabilitation program is adapted, including respiratory muscle training, endurance and resistance training.
- Before discharge → reevaluation of the patient to assess the necessity to follow out patient treatment.

CONCLUSIONS

Patients with complex burns require an interdisciplinary rehabilitation team throughout their care.

The study of the respiratory functionality makes it possible to prepare a respiratory rehabilitation program with the aim of improving the functionality and respiratory function of these patients at discharge.

BIBLIOGRAPHY

- 1.- Respiratory Care. Ronald P. Milcak, Oscar E. Suman, Linda E Sousse, David H. Hernon. Total Burn Care 5th Edition. Elsevier Editions. 30th November 2017
- 2.-Burn Rehabilitation Along the continuun of carw. Michel A. Serghiou, Sheila Ott, April Cowan, Jennifer Kemp-Offenberg, Oscae E. Suman. Total Burn Care 5th Edition. Elsevier Editions. 30th November 2017
- 3.- Occupational Therapy and Physiotherapy for the patient with burns: principles and management guidelines. M. Simons, S. King, D. Edgar. J Burn Care Rehabil 2003; 24:323-335