SUPERABSORBENT DRESSINGS FOR EXUDATE CONTROL

Y. LURTON
Pharmacist - CHU Rennes RENNES – France - email : yves.lurton@chu-rennes.fr

INTRODUCTION

Different dressing types are used for the management of highly exuding wounds: Traditional absorbent pads on the basis of cellulose or cotton (PAt), or moist wound healing dressings, such as alginates and hydrofibres. The dressing should enable absorption of large quantities of exudate under pressure (compression bandaging, patient’s weight) to prevent leakage, causing peri-lesional skin maceration.

NF EN 13726-1 is a test method used in France for primary wound dressings to evaluate absorption capacity. Currently, exudate retention under pressure, is not yet subject to any standard.

OBJECTIVE

Compare the properties of a *superabsorbent (PsA) dressing with polyacrylate particles (SAP), looking at: absorption and retention properties; retention capacity under pressure versus the performance of alginates, hydrofibres, foams and a standard absorbent dressings (PAt).

RESULTS

**MOISTURE TRANSMISSION**

Method : 5ml ionic solution

Sample

Till saturation

*Load 5Kg ≈ 40 mmHg compression therapy

Results :

Moisture transmission to gauze compresses (g)

Unlike other absorbent dressings tested that transmitted a high moisture quantity, the *superabsorbent dressing fully retained the absorbed moisture.

CONCLUSION

These in vitro tests, which are easy to perform, show that the *superabsorbent dressing is characterized by a high absorption capacity, much higher than other commonly used dressings on exuding wounds, especially by an absence of leakage when used under pressure. These properties position the *superabsorbent dressing as an interesting solution for copious exudate.