

Retrospective Case Study: Evaluation of Delta-Lite® Plus vs. the standard used fiberglass cast

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387 clinicians in the USA evaluated the performance of Delta-Lite® Plus Fiberglass Cast Tape

Abstract: Delta-Lite® Plus is a fiberglass cast tape that was introduced to the market in 2009. To evaluate the product performance 387 clinicians were asked to evaluate the new cast tape versus the fiberglass cast tape they currently use.

Nine criteria were identified that describe the performance of a bandage. On each criteria a great majority ranked Delta-Lite® Plus higher and 93% judged the general quality of Delta-Lite® Plus better than the product they currently use.

The Study: 387 clinicians in the USA were asked to evaluate the performance of Delta-Lite® Plus Fiberglass cast tape used for rigid immobilization against the fiberglass cast they currently use. The evaluation took place in the 1st half of 2009.

The clinicians were asked to fill in a questionnaire and indicate which product they prefer on different criteria that are usually employed to describe the performance of a synthetic cast tape.

Criteria for Performance of a Synthetic Cast Tape:

- Packaging / Clarity
- Unrolling Tension
- Tack Level
- Conformability
- End Lay-Down
- Exotherm
- Smooth Finish
- Rigidity
- Lamination

Finally the clinicians were asked to rate the overall quality.

The Results:

Packaging and Clarity of packaging

A quick and easy identification of the right size of the bandage and an easy opening of the protective foil makes the handling easier and avoids cost by opening incorrect products.

315 of 387 clinicians ranked Delta-Lite® Plus higher

Unrolling Tension

Easy and uninterrupted unrolling of the bandage minimizes the risk of constrictions and allows a fast application.

340 of 387 clinicians ranked Delta-Lite® Plus higher

Tack Level

A low tack level enables the use of standard gloves and the possibility to mold the cast to the right anatomical position.

332 of 387 clinicians ranked Delta-Lite® Plus higher

Conformability

Good conformability allows applying the cast to anatomically difficult areas without folds and creases that might result in pressure points.

359 of 387 clinicians ranked Delta-Lite® Plus higher

End Lay Down

The good lamination of the end of bandage guarantees a durable cast and minimizes the risk of unintentional peeling off of the layers.

345 of 387 clinicians ranked Delta-Lite® Plus higher

Exotherm

The exotherm describes the heat that is generated when the resin of the cast cures. High temperature may lead to patient discomfort and even burns.

322 of 387 clinicians ranked Delta-Lite® Plus higher

Smooth Finish

A smooth finish of a cast minimizes the risk that clothes snug to the cast and may be harmed.

365 of 387 clinicians ranked Delta-Lite® Plus higher

Rigidity

Rigidity describes the ability of a cast to immobilize the treated area in a reliable manner, e.g. for lower leg when the cast needs to bear the weight of the patient.

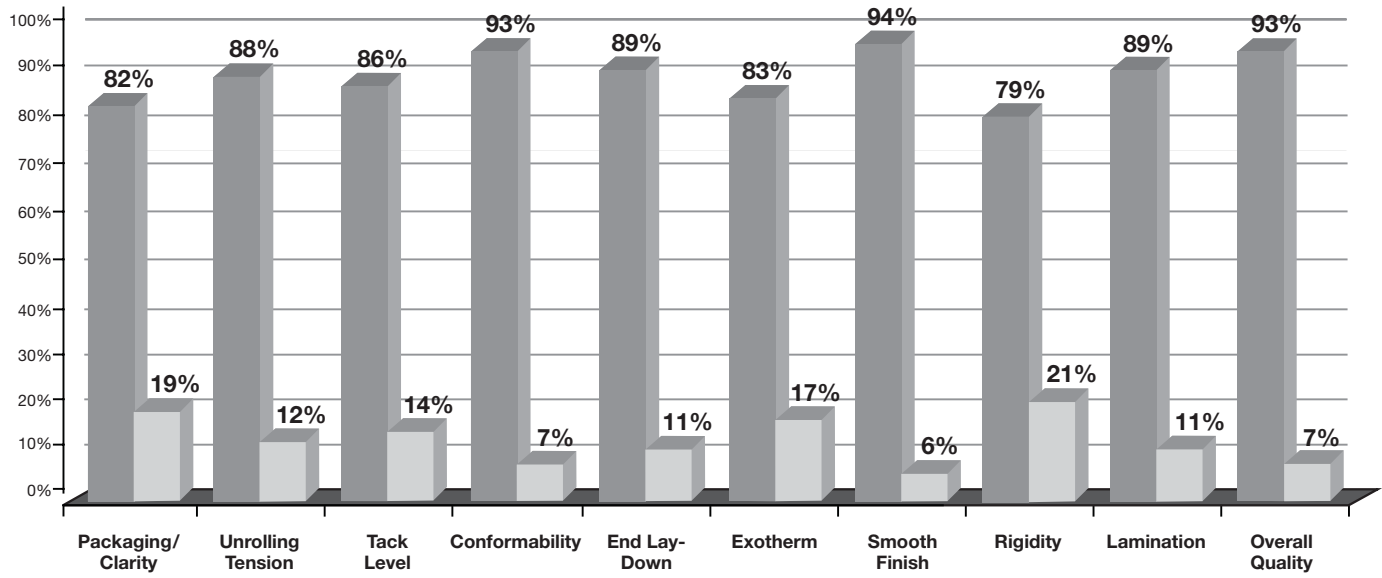
307 of 387 clinicians ranked Delta-Lite® Plus higher

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Lamination

The secure lamination of the single layers of the bandage guarantee the long-lasting stability and support of the cast.

344 of 387 clinicians ranked Delta-Lite® Plus higher



Conclusion:

The Delta-Lite® Plus fiberglass cast tape was ranked in all criteria higher than the currently used cast tapes and a great majority (360 of 387 clinicians) evaluated the overall quality as higher.