Use of cellulose and polyhexamethylene biguanide in the treatment of foot wounds in a patient with venous valve agenesia – Case report

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Introduction:

Klippel-Trenaunay Sindrome (KTWS) is characterized by a triad of port wine stain, varicose vein and soft tissue hypertrophy involving an extremity. There isn't racial predilection and KTWS affects females and males equally. It presents at birth or during early infancy.

The Klippel-Trenaunay vein is a large, lateral, superficial vein sometimes seen at birth. It begins in the foot or the lower leg and travels proximally until it enters the thigh or the gluteal area.

Other features include lymphatic obstruction, spina bifida, syndactyly, chronic venous insufficiency, ulceration and poor wound healing.

Material and Methods

The patient was a 32 year-old female with pronounced right leg hypertrophy, venous valve agenesis, venous insufficiency and varices.

She had three wounds on the right foot:

A - sub lateral malleolus	4.0 cm ²
B - retro lateral malleolus	1.2 cm ²
C –dorsal	1.3 cm ²

All wounds presented a variable granulation equal to B1 grade of Falanga Wound Bed Score. They showed signs of critical colonisation.

The wounds were treated according to WBP/TIME rules and subsequently they were managed with a HydroBalanced biocellulose/ polyhexamethylene biguanide (PHMB) dressing* in conjunction with polyurethane foam**.

A short stretch compression therapy*** was also used and changed every seven days.

Results

All the wounds healed but in different time:

- A: 84 days B: 7 days
- C: 21 days

There was also a clear improvement in perilesional skin.

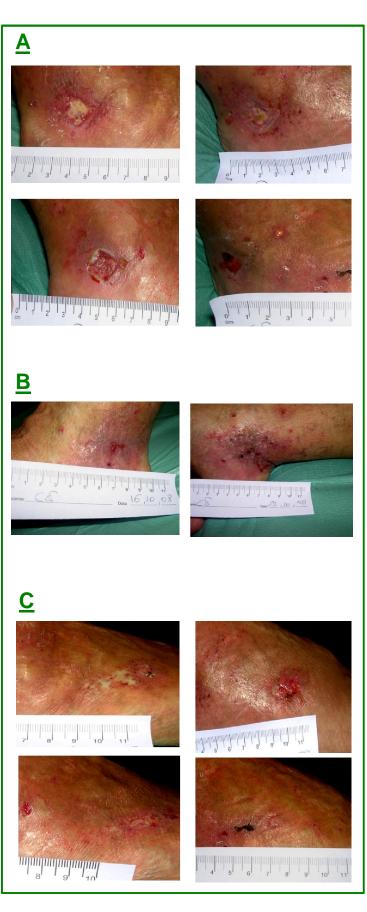
<u>Conclusion</u>

The choice of compression therapy was fundamental for the success of the treatment by virtue of changes in the patient's anatomy. Cytotoxicity and allergies were not noticed. This wound dressing is very effective in managing exudate and consequent wound moistness and colonisation.

Pain reduction was significant during the treatment and, in according to Visual Analogue Scale (VAS), it decreased from 3 to 0.

- * HydroBalance dressig with PHMB: Suprasorb[®] X+PHMB
- ** Polyurethane foam: Suprasorb[®] P
- *** Short stretch compression therapy: Rosidal® Lohmann & Rauscher

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