

Achieving healing in a young adult with a venous leg ulcer using a biofilm pathway and short stretch bandaging

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Liam is a 26 year old man who suffered a post trauma DVT when just 18 years old. He has Warfarin therapy and has a history of venous leg ulceration for 8 years. Because of the damage to his primary, deep veins he had developed a collateral venous circulation.

Liam describes having a leg ulcer at a young age as “life changing”. It stopped him playing sport and swimming and it changed how he interacted with friends. Because of his damaged circulation and medication, he lived with the constant fear that his leg was going to deteriorate or bleed. Despite this, Liam continued to work full time and support his family.

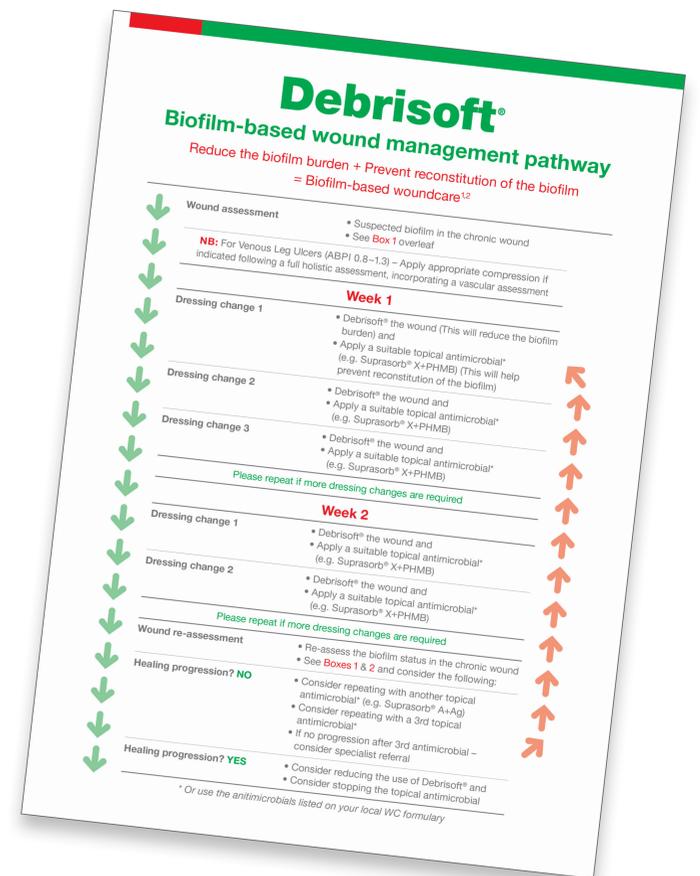
Method

In the summer of 2018, Liam’s nurse changed his treatment;

- From combination long-stretch cohesive bandage system, to a **cohesive short stretch bandage***
- Implemented a **monofilament fibre**** biofilm based treatment regime to expedite wound bed preparation and disruption of the biofilm¹

Results

- There was a dramatic reduction in leg oedema and improvement in leg shape almost immediately
- Liam reported that the cohesive short stretch bandage system made “his leg feels much more comfortable with less ridging and less slippage”
- His leg shape was much better and it was easier to wear socks and shoes. Liam said that nobody noticed he had a bandage on



The **monofilament fibre**** biofilm based treatment regime to expedite wound bed preparation and disruption of the biofilm²



Figure 1 & 2 – 12.4.18 before treatment with monofilament fibre debridement technology

Figure 3 & 4 – 12.4.18 after first treatment showing removal of superficial bacteria and uncovering deeper pockets of bacteria with monofilament fibre debridement technology

Figure 5 & 6 – 12.4.18 after second treatment showing removal of deeper pockets of bacteria with monofilament fibre debridement technology

In December 2018, after 8 years of ulceration, Liam’s venous leg ulcer healed.

Conclusion

- This case study demonstrates how learning and implementing new knowledge, technology and skills can translate into improved patient outcomes
- By sharing Liam’s story we can really understand the devastating effect a leg ulcer can have, especially on a teenager and young adult
- Liam now has a bespoke plan for the prevention of future venous leg ulcers which will include higher compression while at work when he will be on his feet for long periods
- This is achieved by using **short stretch wrap systems***** to encourage continued self-care and ownership of his long term condition

¹ Morris C et al (2016) The management of chronic wound biofilm with a monofilament fibre debridement biofilm pathway: results of an audit. Poster presentation - WUWHS, Florence, Italy.

² Morris C (2018) Evaluating the removal of bacteria and biofilm with monofilament fibre debridement technology, compared to a cleaning product using a wound intelligence device. Poster presentation - EWMA, Krakow, Poland.

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