The introduction of a cohesive short stretch bandage into a specialist leg ulcer clinic.

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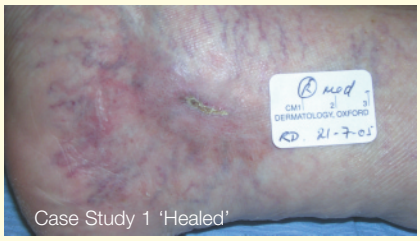
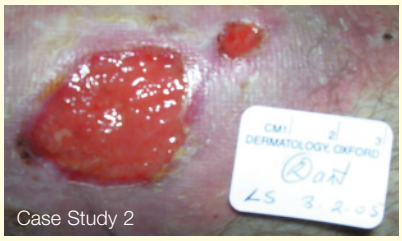
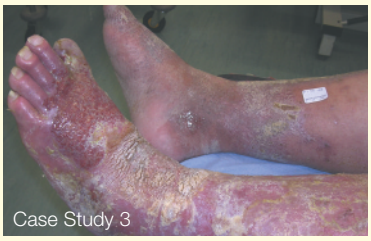
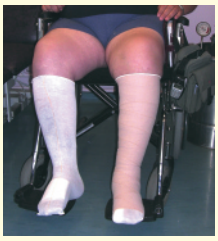

Case Study 1 'Healed'


Case Study 2


Case Study 3



Introduction

Compression has long been acknowledged as the mainstay of management of venous leg ulcers. There are various systems of compression bandage: 4 layer, 2 layer, long stretch, short stretch. Different countries have their own preferences Holland Austria and Scandinavia predominantly using short stretch while the UK has traditionally favoured long stretch and 4 layer systems. In our specialist leg ulcer clinic all bandage systems are used, but long stretch bandage and 4 layer bandage have predominated over short stretch. This has been partly due to the difficulties in educating nurses in the community (with whom we share patient care) in the use of an unfamiliar bandage system.

Moreover, it is widely believed that short stretch bandaging is ineffective in the management of ulceration in an immobile patient. However, in our clinic it has been used effectively to reduce oedema in patients who are immobile.

Aim

The aim of this case study series (10 patients) was to evaluate the effectiveness of, and patient satisfaction with cohesive short stretch bandaging with a view to introducing the bandage system into our clinic.

Methods

10 patients with venous/mixed aetiology ulceration (referred from the community or previously attending clinic for compression bandaging) were selected for short stretch cohesive bandaging. All patients' care was shared with the community and education was arranged in the bandage technique for nurses unfamiliar with the technique. Healing rates were monitored over a 16 week period and patients' comments were recorded.
Two immobile patients were recruited into the study.

Results

All patients' ulcers have reduced in size or healed. The bandage was well tolerated by patients; they found the bandage comfortable and liked its lack of bulk. One patient had been unable to tolerate other bandaging. All nurses found the bandage simple to apply and the bandage stayed in position well between dressing changes. The immobile patient's limb reduced in size and ulceration improved.

Case study 1 (shown above)

76 year old female with an 18 months history of a small 2 x 0.5cm ulcer on the right medial malleolus. Medical history included: DVT, bilateral knee replacements, hypertension and mastectomy. Pain was worse at night and after dressings, ranging from 0 – 10 (10 equating to unbearable) Modified four layer bandage had been used. On examination the leg was oedematous, but with no hemisiderin staining or varicosities other than ankle flare.

Atrophe blanche was noted. The ulcer was observed to have a slightly raised rolled edge; this was documented and checked by the physician for possible malignancy. Doppler ABPI was >1.

Dressing regime; Weekly topical application of Trimovate cream (a combination of antifungal, moderate steroid and antibiotic) was advocated for pain relief. Non-adherent dressing, pad and Tubifast. (a thin cotton tubular retention bandage to hold the dressing in place), Softban (thin cotton wool bandage spiralled up the lower leg to protect bony prominences) with one layer of Actico short stretch bandage.

The ulcer healed within 5 weeks. Patients comment: 'Because I have been comfortable I have been able to relax, exercise my foot and walk better. It has been truly miraculous.

Case study 2 (shown above)

60 year old gentleman with a traumatic injury of 5 years duration to the shin.

Medical history included: Coronary Heart Bypass, Colitis, Varicose vein stripping and hypertension.

Current medication: Prednisolone, Methotrexate and Atenolol.

Pain level: 0 – 10 (10 equates to unbearable) Patient comment- 'nearly had me crying.' K Band was being used as compression.

On examination he presented with a superficial 4 x 2.5cm ulceration on the right medial anterior shin. Doppler ABPI was >1.

Dressing regime: Aquacel, pad, Tubifast, Softban and Actico short stretch bandage x 2. Advice was given re: foot exercise, elevation and walking.

At the 3 week follow up clinic his pain was reduced and the ulcer was improving. At 7 weeks the ulcer had reduced by 50% and healed @ 16 weeks. Compression hosiery was instigated.

Case study 3

46 year old obese wheelchair bound gentleman with bilateral venous disease and lymphoedema. Medical history included right long saphenous vein stripping and ligation of perforators. He was unable to weight bear and had neuropathic pain in the right shin.

On examination he presented with wet raw areas on the left dorsum and toes with skin maceration. Bilateral doppler ABPI was >1. Referred for patch testing.

Treatment regime: Diluted potassium permanganate soak, Trimovate to the skin, Daktarin between the toes, NA pad, Tubifast and Tubigrip. Swab result showed a Streptococci Haemolytic group G infection for which antibiotics were prescribed.

At the next clinic visit Actico short stretch bandage x 2 was commenced.

He is currently being seen on a monthly basis and has been measured for Class 3 hosiery.

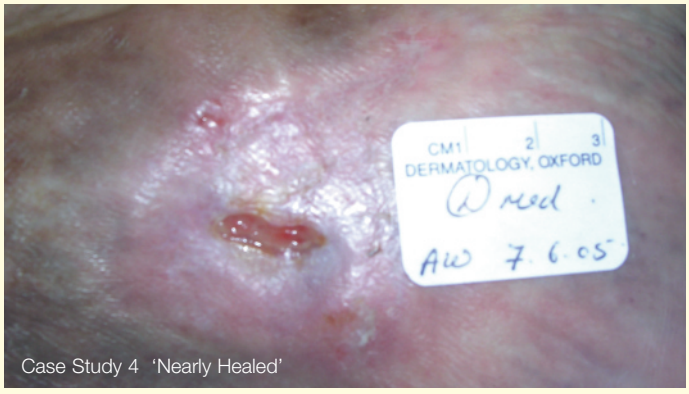
Case study 4 (shown below)

63 year obese female with a 30 year history of intermittent venous ulceration and medical history of hypertension, osteoarthritis and DVT right leg.

She was seen in the Leg Ulcer Clinic with a breakdown of ulcer in August 04. The 4 layer bandage was commenced, subsequent swab result showed profuse growth of anerobes and moderate growth Staph., for which antibiotics and topical application of Metrotop was applied. Pain was severe at night Level 9 -10 (0 -10) therefore Amitriptyline was prescribed.

Over the next few months there was minimal improvement with recurrent slippage of the bandage despite regular visits to the practice nurse. It was arranged for her daughter to come to the clinic and be taught how to apply the Actico Short stretch bandage. This arrangement worked well because the daughter could re-bandage whenever necessary.

The ulcer has healed and compression hosiery is now being worn.



Case Study 4 'Nearly Healed'

Case study 5 (shown below)

78 year old female with a 4 week traumatic injury to the left lateral gaiter. Medical history of diabetes and hypertension.

On examination there was a 5 x 7 cm necrotic/sloughy ulceration with local erythema. ABPI was >1 and Light Reflective Rheography showed a graph reading of 15 second venous refill time (normal > 25 seconds) indicating venous disease.

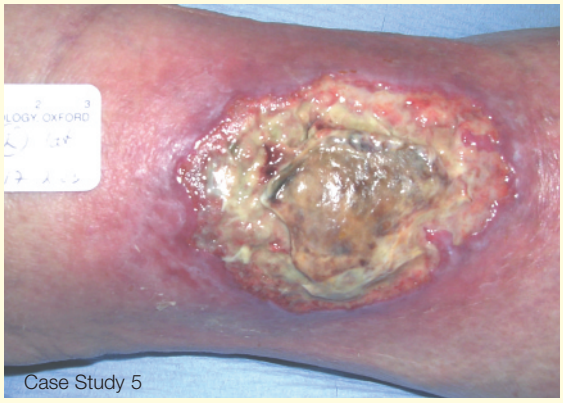
The ulcer was debrided following application of Emla (a topical local anaesetic, Iodosorb and double shaped Tubigrip was applied.

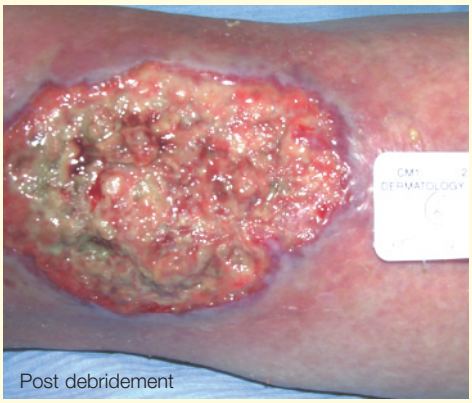
A biopsy performed 2 weeks later proved to be negative. Actico bandage was commenced and the ulcer healed within 8 weeks.

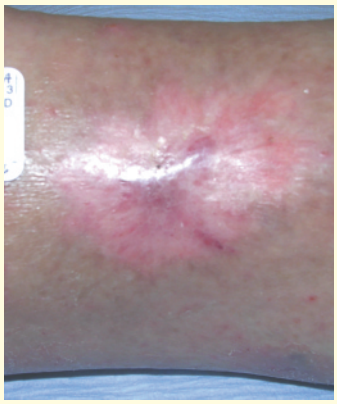
The patient was supplied with Class 1 hosiery.

Discussion

Following these satisfactory evaluations we have adopted cohesive short stretch bandage as the first bandage of choice and is becoming widely used in the community.


Case Study 5


Post debridement



Case studies

No.	Sex	Age	Aetiology	Size	Duration	Prior comp	Outcome	Comments
1	Female	76	Venous	2 x 0.5 cm Bilateral knee replacements	6 months	Modified 4 layer	Healed @ 5 weeks	Because the bandage was comfortable I was able to relax, exercise my foot and walk better. It was truly miraculous'
2	Male	60	Traumatic/Ven	4 x 2.5cm Hypertention Coronary heart disease Rx Prednisolone Methotrexate	5 years	K band	Healed @ 16 weeks	Pain -'nearly had me crying' Pain reduced after 3 weeks 50% reduced @ 7 weeks
3	Male	46	Venous/ Lymphodema	10 x 4 cm	2 months	Tubifast	Healed	Wheelchair bound
4	Female	63	Ven	4 x 3 cm Oesteo arthritis DVT	1 week	Hosiery	Healed	Daughter taught to apply Actico
5	Female	78	Traumatic/Ven	5 x 7 cm Diabetic	4 weeks		Healed @ 8 weeks	
6	Female	59	Ven	8x4 cm	4 months	no	Healed @ 16 weeks	Volumes down
7	Male	49	Ven	12x 9 cm	2 months	Elset	Size reduced by 50%	Couldn't tolerate other compresion Volumes reducing
8	Male	59	Lymphodema	13 x 6 cm Diabetic Bilateral leg fractures Fasciotomy/skin grafts Amputation hallux			Improving	Wheelchair bound
9	Female	77	Ven	3 x 3 cm OA/knee replacement Hypertension	14 months		Improving	
10	Male	70	Ven/Diabetic	3 x 3 cm Hypertention	3 months	Hosiery	Healed @ 6 weeks	