



Fast'n Go Bandage
Developed specifically for
Self-bandaging and
Homecare



TRADITIONAL BANDAGING SYSTEMS

One of the main pillars in the management of veno-lymphatic dysfunctions, compression bandages are characterized by their stretch/force curves (Fig.1) which determine the effects they have on the patients' limbs once applied. The 2 fundamental actions of compression bandages can be illustrated with :

INELASTIC BANDAGES

- Maximum elongation of 10% and steep stretch/force curve (Fig.1)
- Therapeutic objective: to build an inelastic barrier around the limb to prevent the development of oedema.

✓ Main advantage: high "working pressures"⁽¹⁾, especially during limb mobilization.

☹ Main inconvenient: have to be applied by trained staff.

LONG STRETCH BANDAGES

- Maximum elongation > 100% and flat stretch/force curve (Fig.1)
- Therapeutic objective: to apply "resting pressures"⁽¹⁾ on the limb to facilitate the venous and lymphatic return.

✓ Main advantage: easy application

☹ Main inconvenient: low "working pressures"⁽¹⁾

From a "mechanistic" point of view, these curves allow us to understand the respective advantages of inelastic and long stretch bandages:

- With long stretch bandages, the application on the limb will be easier as a +/- 5% difference of elongation at application stretch will generate a minimum difference of compression. (Fig.2)
- With inelastic bandages, the effect on the limb will be greater as a +/- 5% volume change due to limb mobilization will generate greater "working" pressures⁽¹⁾ (Fig.3)

The « art » of bandaging consists in combining 2 fundamental principles : inelasticity and elasticity.

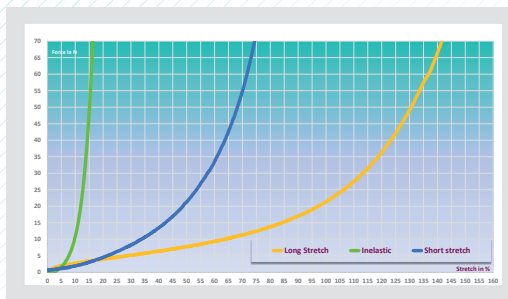


Fig.1 - Stretch/force curves

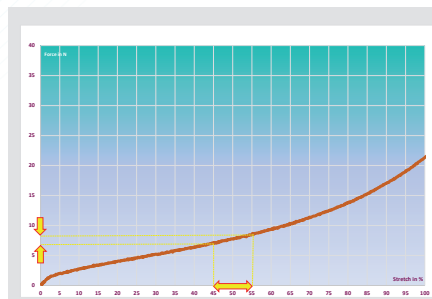


Fig.2 - Detail for long stretch bandages

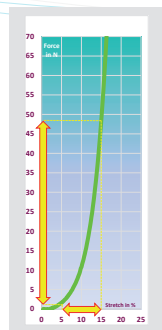


Fig.3 - Detail for inelastic bandages

SINGLE LAYER SHORT STRETCH BANDAGES

Short stretch bandages have a stretch/force curve that stands in between inelastic and long stretch bandages (see Fig. 1). Historically, they have been the logical alternative to inelastic and long stretch bandages, especially for the management of oedema.

- They are normally used in combination with other inelastic and/or elastic bandages.
- Their maximum elongation is between 10% and 100%.

✓ Main advantage: high «working pressures»⁽¹⁾ especially during limb mobilization.

☹ Main inconvenient: have to be applied by trained staff.

Initial results of the ReproComp study⁽³⁾ clearly show that with a traditional short stretch bandage Trained Staff (TS) reach a much better intra-personal reproducibility than First Timers (FT), people who had never applied a bandage before. (See fig.4)

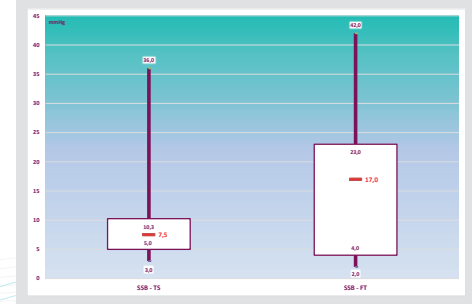


Fig.4 - ReproComp study

MULTI-LAYER KITS

Developed in the 80s, these systems work on the principle that the application of different layers of inelastic and/or elastic bandages will eventually end up with making a stiff bandage.

✓ Main advantage : high « working » pressures.

☹ Main inconvenients : have to be applied by trained staff and the application takes a lot of time

TWO-LAYER KITS

Two-layer kits have been developed more recently with the objective of simplifying the application by reducing the number of layers while maintaining a high efficiency level.

✓ Main advantage: proven efficiency.

☹ Main inconvenients : not reusable, which means a substantial cost to the health care systems and a large environmental impact in the management of chronic conditions

With current bandaging systems, this has to be done on the patient's limb at each application

**ALL THESE SYSTEMS HAVE
TO BE APPLIED BY TRAINED STAFF
THEY ARE THEREFORE
NOT ADAPTED FOR SELF-BANDAGING
AND HOMECARE**



SPECIFIC NEEDS FOR SELF-BANDAGING AND HOMECARE

SELF-BANDAGING CHALLENGES

Self-management and homecare are the way forward in the management of chronic diseases as they have an extremely positive impact on the overall cost of care. It is also proven that patients who are capable of understanding and delivering their own treatment will get much better results.

The 2 main reasons why self-bandaging is not so developed are technical and practical:

- Technically, all international recommendations agree that bandages should be applied by trained staff which, by definition, is hardly compatible with self-bandaging. Some practitioners even prefer their patients not to wear bandages rather than see them doing something wrong with traditional bandages.
- Practically, many patients consider self-bandaging as a difficult and time-consuming task as it means having to apply (and to rewind, let's not forget about it) a minimum of 2 and up to 15 or 20 bandages.

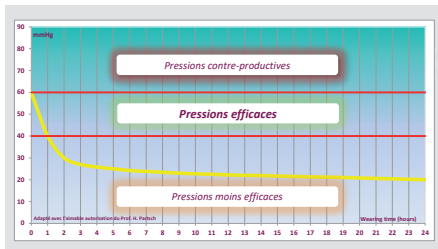


Fig.7 - Compression and time

CURRENT PRACTICES

From a patient's perspective, current practices in bandages can also be questioned:

- Why are patients typically required to wear their bandages for 12 to 24 hours (or more) when we know that, on a lymphatic limb, they will lose half their compression within 2 hours* (Fig. 7)
- How can patients be asked to wear their bandages for up to 7 days when international guidelines recommend daily skin care and when it also means most patients will not be able to take a shower during this period ?

With Fast'n Go bandage, this is done in our workshops once and for all, simply

CONTINUUM OF CARE

In the management of lymphoedema, limiting the use of compression bandages to the intensive phase is a mistake as «using bandaging and compression hosiery in combination will be more effective at reducing and maintaining limb volume over six months than using hosiery alone**»

During our research for the development of **Fast'n Go** bandage we also came across the fact that some self-bandaging patients actually preferred compression bandages to garments. They told us that when they applied their bandages they felt they were fighting against their disease while they described garments as just passive solutions.

* Best Practice for the Management of Lymphoedema – 2nd edition – International Lymphoedema Framework – www.lympho.org

** Badger C, Preston N, Seers K, et al (2004) Physical therapies for reducing and controlling lymphoedema of the limbs. Cochrane Database Syst Rev. 18 (4): CD003141. Review

HYBRID SHORT STRETCH BANDAGE...

Thanks to its' unique structure (Fig. 5), **Fast'n Go** bandage is the only short stretch bandage to use an hybrid patented technology which combines the respective benefits of inelastic bandages (high working pressures) and long stretch bandages (easy application) while getting rid of their respective inconvenients.

MANUFACTURING TECHNIQUE

STEP 1 :

we insert a long stretch bandage into an inelastic bandage

Step 2 :

we stretch the elastic bandage at 30%

Step 3 :

we assemble both bandages with transversal seams every 10 cm

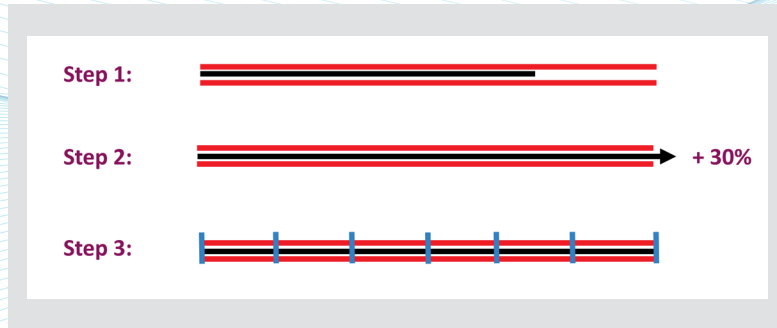


Fig. 5 - Manufacturing technique

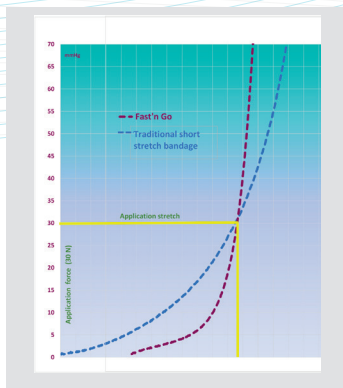


Fig. 6 - Overlap Fast'n Go / traditional short stretch bandage

HYBRID TECHNOLOGY

Technically, this unique technology allows us to have:

- a maximum stretchability mechanically limited to 30% for an easier and safer application.
- a bandage that behaves like a long stretch bandage below its' application elongation. (Fig 6).
- a bandage that behaves like an inelastic bandage once applied on the limb (Fig 6). **Fast'n Go** bandage is probably one of the stiffest bandaging system available and definitely the stiffest single layer bandage.

... THAT MEETS THE NEEDS FOR SELF-BANDAGING AND HOMECARE

SIMPLE & FAST

- ✓ Faster application as only one bandage to be applied, so no need to worry about which roll should be applied first
- ✓ Identical sides so no need to worry about which one has to be in contact with the skin.
- ✓ Stretchability limited mechanically for safer and more reproducible compression.
- ✓ Anchor Point for easier application start (3), especially when self-bandaging the upper limb (see 1).
- ✓ Pre-stretched bandage application technique (see 2 & 3)
- ✓ Visual guide for easier 50% overlap. (see 4)
- ✓ Moreover, **Fast'n Go** bandage is washable, reusable and very comfortable against the skin.



3



1



2



4

Which has never been easier and faster than with Fast'n Go bandages

Fastening a bandage has always been a problem, especially for patients self-bandaging their upper limb as, by definition, they just have one hand to do so. Many patients and practitioners asked us to find a solution and we accepted this ultimate challenge with 2 non negotiable conditions: simplicity and comfort, and we did it !

Our patented fastening system consists in a single and soft material band with hooks and loops that only grip to each other when the material is stretched. Very easy to apply and to remove, it does not hurt the patient and does not damage the bandage as current fastening systems do. It attaches to the bandage with a hook and can be removed very easily if needed.

Extremely simple to apply and to remove, and very comfortable, our patented fastening system has many other possible uses and we are currently developing many other solutions, so watch this space.....



NEW

FAST'N GO, THE ONLY BANDAGE THAT COMBINES...

THE BENEFITS OF INELASTIC BANDAGES ...

The effects of inelastic bandages over a limb were initially characterized with steep force/stretch curves. Then came sub-bandage pressure monitors who allowed us to measure the resting and working pressures ⁽¹⁾ and therefore to measure the stiffness of bandages. With fluoroscopy images, we can now see the effects of bandages on the lymph circulation directly inside the limb. In the images below ⁽⁶⁾, a healthy volunteer was asked to perform a very simple exercise: to squeeze a soft ball in his hand.

In the first image (Fig 9) he was not wearing any compression and in the second image (Fig 10) he was wearing a **Fast'n Go** bandage. Both images were taken approx. 4 minutes after the start of the exercise. The effects of the inelastic component **Fast'n Go** bandage are very clear.

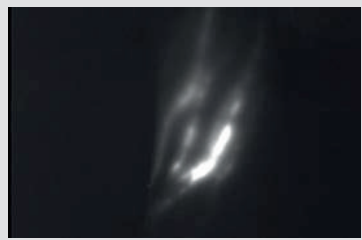


Fig. 9 - Without bandage

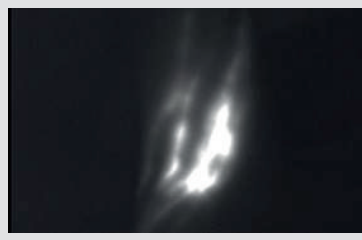


Fig.10 - With Fast'n Go bandage

Images courtesy of J.P. Belgrado and the Team of the Lymphology Research Unit at the Université Libre de Bruxelles, Belgium.

To meet the daily life needs of the patients and improve their treatment and experience with compression bandages

... WITH THE BENEFITS OF LONG STRETCH BANDAGES

Initial results of the ReproComp study ⁽²⁾ clearly show that with **Fast'n Go** bandage, people who had never applied a bandage before (FT) are able to reach similar, or even slightly better, levels of intra-personal reproducibility than Trained Staff (Fig. 8). It has to be noticed that for both First-Timers and Trained Staff, it was the first time they applied **Fast'n Go** bandage. These results should therefore be improved even further with our training programme ⁽⁵⁾ and with practice.



RE APPLICATION

Because it can be done very easily and very quickly, **Fast'n Go** will allow patients to apply and remove their bandage as many times as they want during the day.

Not only will this regular re-application allow them to adapt the treatment much better to their daily life (exercise, showers, ...) but we also strongly believe that it should improve their treatment as each time they re-apply **Fast'n Go** bandage they will start again from the maximum efficiency.

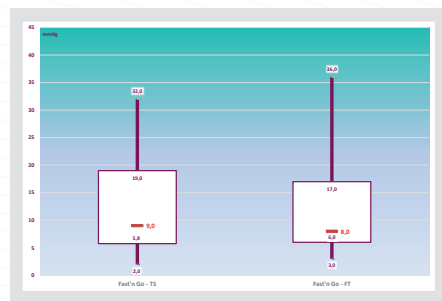


Fig.8 - Intra-operator reproducibility with **Fast'n Go** bandage

WANT TO LEARN MORE?

PLEASE VISIT OUR WEBSITE

/Fundamentals of compression

(1) The "resting" pressure is the compression value measured with the immobile patient sitting or lying with the limb in a horizontal position. The "working" pressure is the compression value measured with the immobile patient standing up. The difference between the "working" pressure and the "resting" pressure is called Static Stiffness Index (SSI).

/ReproComp.

(2) ReproComp study: the aim of this study is compare the inter-operators and intra-operator reproducibility achieved by 2 groups of applicators, Trained Staff (People working in a University Hospital whose job is to apply bandages all day - n = 12) and First-Timers (People who have never applied a bandage before - n = 15), with 2 long stretch bandages (LSB) and 2 short stretch bandages (SSB).

WWW.FASTNGO.CARE

/videos

(3) The anchor point has been designed initially for the upper limb but it can also be used for the leg, especially for patients who need more compression in the retro-malleolar area.

/videos

(4) The pre-stretched application technique consists in winding up the bandage under tension and to apply it close to the limb to avoid adding unnecessary compression with a torque effect.

/videos

(6) See the complete fluoroscopy film.

/training

(5) Thonic Innovation has developed a specific training programme for Fast'n Go.

CONTACT US

Bât. 4Puissance3 – ZA Chavanon2
43120 Monistrol-sur-Loire (France)
Cell. +33 (0) 6.32.82.07.67. – contact@thonic.care
WWW.THONIC.CARE / WWW.FASTNGO.CARE

