

# Case Study on ankle injuries using the BeneCare Memory Ankle Brace

in partnership with The Royal Shrewsbury Hospital

Ankle injuries are often thought of as sports injuries. But you don't have to be an athlete or even a "weekend warrior" to turn your ankle and hurt it. Sometimes something as simple as walking on an uneven surface can cause a painful, debilitating sprain. The most common ankle injuries are sprains and fractures, which involve ligaments and bones in the ankle, but you can also tear or strain a tendon.

## Causes of Ankle Injuries

An ankle injury occurs when the ankle joint is twisted too far out of its normal position. Most ankle injuries occur either during sports activities or while walking on an uneven surface that forces the foot and ankle into an unnatural position. The unnatural position of the ankle in high-heeled shoes or walking in unstable, loose-fitting clogs or sandals is also a factor that may contribute to ankle injuries.

The symptoms of a sprain and of a fracture are very similar. In fact, fractures can sometimes be mistaken for sprains. With a sprain, the ankle may also be stiff but with a fracture the area will be tender to the touch, and the ankle may also look deformed or out of place.



## Kinds of Ankle Injuries

Ankle injuries are defined by the kind of tissue [bone, ligament, or tendon] that's damaged. The ankle is where three bones meet; the tibia and fibula of your lower leg with the talus of your foot. These bones are held together at the ankle joint by ligaments, which are strong elastic bands of connective tissue that keep the bones in place while allowing normal ankle motion. Tendons attach muscles to the bones to do the work of making the ankle and foot move, and help keep the joints stable.

A fracture describes a break in one or more of the bones. A sprain is the term that describes damage to ligaments when they are stretched beyond their normal range of motion. A ligament sprain can range from many microscopic tears in the fibres that comprise the ligament to a complete tear or rupture. A strain refers to damage to muscles and tendons as a result of being pulled or stretched too far.

# Case Study Report

Craig Mitchell, Senior Orthopaedic Practitioner - Royal Shrewsbury Hospital

## When would you use the BeneCare Memory Ankle Brace (MAB)?

“We in the Plaster Room & the Emergency department at Royal Shrewsbury Hospital use the BeneCare Memory Ankle Brace daily for a variety of different injuries including:

- Conservative treatment of un-displaced ankle fractures.
- Occasionally used for 1<sup>st</sup> day post injury (dependent on the consultants & patients requirements).
- Rehabilitation after bony fractures. Often used after removal of casts or Walker Boots.
- Un-displaced Metatarsal fractures; used in conjunction with supportive footwear or cast/post op shoe such as the Benefoot ‘Original’ Post-Op Shoe.
- Soft tissue injuries of the ankle, as used with supportive foot wear.”

## Why do you use the BeneCare MAB?

“We’ve found that Memory foam is the best medium to help provide stability. Air braces don’t provide support as they are in constant motion when the ankle is active; and gel braces are also not as suitable as the gel dissipates through the bladders and patients end up feeling the stirrup on their bone and some plastic gel or air pads are unpleasant & hot to wear. However memory foam compresses and holds the ankle in position, moulding around the patients leg & ankle for a nice even fit.”



Craig Mitchell with the BeneCare MAB

## Are there any additional features about this brace that help in your application?

“Yes. The simple, adjustable heel strap and the pivoted fixations for the ankle straps ensure that the BeneCare Memory Ankle Brace stays securely in place during activity providing our patients with stability, comfort and confidence which helps increase compliance. We also enjoy the fact that the brace is of a universal size and there are no left or right specifics allowing us to work efficiently.”

## You mentioned it helps you to work more efficiently, what do you mean by that?

“Well here in Shrewsbury we have reduced our application time when using the MAB as we traditionally used to make stirrups using a fibreglass based splinting system which is more time consuming. By using the MAB we found that we could achieve the same fit and support in a less time consuming manner at a fraction of the cost & time, really the best of both worlds!”

So why then did you choose our ankle brace over other alternative ankle stirrups available on the market?

“Really it is the only product I have seen that is totally universal and that fitted our needs. Even once removed it can be replaced back on the ankle either way round; whereas with custom moulded splints and most other ankle stirrups they can only be replaced the same way they were put on. Indeed we would occasionally see patients returning to clinic or telephoning the plaster room for advice with regards application of their splints. Now we rarely have problems with patient’s returning due to misapplication, and because of the ease and of application of the MAB.”

“We also supply and fit a large number these splints to the Emergency department. Due to the braces ease of application it helps those members of staff with less experience apply the brace without assistance, correctly and quickly.”

Would you recommend the BeneCare MAB to other hospitals and if so why?

“Yes I would, if you are looking for a universal ankle stirrup for efficient quick and easy application for staff and patients and which is effective give the MAB a try. I have also recommended it to some trusts that are looking for this type of brace.”

Thanks for your time Craig, it has been a pleasure talking to you and your thoughts have been invaluable.

This highly engineered product using quality materials sourced by some of the finest manufactures around the world is available [directly from us](#) as well as being available via the [NHS Supply Chain](#).

I would like to take this opportunity to thank Craig Mitchell and all the staff at The Royal Shrewsbury Hospital for your valuable insight into the uses and benefits of this product as well as your continued support.

Many thanks

*Leo Lachs*

Some of the introductory information on ankle injuries can be found online at <http://www.webmd.com/>