Unconventional, but effective: SofTec Genu for MS "I'm able to enjoy life again"

Marianne Serdrup Larsen suffers from multiple sclerosis (MS), her left leg being particularly affected. The use of a SofTec Genu knee orthosis has helped her to significantly improve her mobility and feeling of control after just a short time. We talked with her and Karsten Høgh, physiotherapist and CEO of Fysio-shop.dk Denmark.

Bauerfeind life: Ms. Larsen, you have been wearing a SofTec Genu since the end of 2016. How do you feel?

Marianne Larsen: Very, very good. SofTec Genu allows me to do physiotherapy, fitness training and water aerobics four times a week. My functional performance has notably improved. I'm much more mobile and less dependent on assistance.

Mr. Høgh, as a physical therapist, you recommended the SofTec Genu to Ms. Larsen. What led to this decision?

Karsten Høgh: Mrs. Larsen searched for advice and useful products for her knee on the internet and contacted us as specialists. Besides the known benefits of using Bauerfeind knee orthoses with compression, I had for years been studying and testing the advantages of compression on sensomotorical dysfunctions like Parkinson's disease and MS. The first time I noticed the positive effects was with patients experiencing instability and postural balance problems. They were able to quickly and effectively resolve this problem by using orthoses. Mrs. Larsen and I met at her home. I tested her functionally and fitted her with a SofTec Genu, which immediately had a great effect on her stability and quality of gait.

How did she respond to the orthosis?

Karsten Høgh: With MS, an auto-aggressive reaction of the immune system irreparably impairs the transmission of nerve signals. Compression cannot undo this and there is still a loss of nerve impulses. However, at the same time, compression does create many new nerve stimuli. This effect was – and still is – an important factor in helping Ms. Larsen to significantly improve control over her legs. And of course, the orthosis stabilizes the knee joint in terms of preventing non-functional and undesired movements.

Ms. Larsen, how long have you had multiple sclerosis?

Marianne Larsen: Probably for 30 years now. MS is a disease that may come in flare-ups, with nothing happening in between, even for many years. In the early stages of the disease, I didn't even really notice those flare-ups. It wasn't until 2008 that things turned bad. I had a really bad flare-up and an acquaintance suggested that I should be tested for MS. It was then that the disease was finally diagnosed. In the meantime, my MS has developed to especially impact the left half of the body, particularly my left leg. I get tired very quickly and have lost most of my control over that leg. Karsten Høgh: The disease has given Ms. Larsen a pronounced functional hyperextension instability of the knee and difficulty in lifting the foot. This, coupled with her getting tired quickly, led to progressive immobility. Ultimately, she was hardly able to walk on her own and was dependent on an e-wheelchair.

Can you move better now with the SofTec Genu?

Marianne Larsen: The progress is amazing. But I also train four times a week... Karsten Høgh: Two sessions with a physiotherapist, a fitness workout, and one water aerobics session. By the way, water aerobics



Physiotherapist Karsten Høgh believes that improving the patient's quality on gait together with increased performance on pace and distance is beneficial for the entire body and also reduces functional imbalances and secondary damage to the joints.

Walking with confidence, thanks to SofTec Genu: Marianne Larsen benefits from the combination of a compression knit with proprioceptive effect on the muscles and the stabilizing joint splints.

is very good for MS patients, because the water pressure creates additional nerve stimuli, along with other benefits.

Marianne Larsen: I can even walk on a treadmill now. That was unimaginable before. I can already do 1,200 meters, and I was even able to increase my pace from 2.6 km/h to 3.8 km/h.

Karsten Høgh: And remember that this feeling of control and a perfect-fitting SofTec Genu has enabled Marianne to obtain very positive results in endurance, muscle strength and stability, not only for the affected leg but also for the rest of her body. So, awhile her results thus far are guite positive, she may not yet have reached her maximum performance, despite suffering from an auto-aggressive disease such as MS. These are really impressive numbers. Marianne Larsen: The training workouts have also helped me to move much more securely in general. For example, I only need to hold onto the shopping cart when doing my grocery shopping. That didn't work at all just a short time ago. I'm really enjoying life again!

Is there anything that needs to be considered when using compression on MS patients?

Karsten Høgh: No, not really. You can use compression like you would on anyone to stabilize a specific joint injury. I do not believe that a stronger degree of compression has a greater effect. And I consider it effective, the possibility to custom fit Bauerfeind orthoses like a SofTec Genu, as well as their reliable and durable compression.

Could the knee orthosis also be useful for other MS patients?

Karsten Høgh: I'm sure there are many MS patients for whom a SofTec Genu would be an option, especially those who have the same kind of problems as Ms. Larsen. However,



what first needs to be resolved is the problem that too few doctors, physiotherapists and patients know about how the use of such an orthosis can significantly alleviate the functional symptoms of MS and that patients can achieve a much better quality of life by wearing an orthosis.

At Fysio-shop.dk we try to run as many valid functional tests as possible to prove and

guarantee that using a special orthosis like SofTec Genu will be effective. This is a very relevant part of our educational work with professionals and retailers in Denmark. There is a great potential for using Bauerfeind products with medical compression on neurological diagnoses with the loss of neuromuscular function and functional impairment.