

MEDICOVI®

Water Wave Balance Technology

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MEDICOVI's water filled hydrodynamic insoles can provides an immediate improvement in balance for many Parkinson's patients.

A completely automatic and mechanical function, which occurs immediately when the insoles are within the shoes.



Henning Frederiksen was diagnosed with Parkinson's in 2013.

*"There are several things that springs to mind when you suffer from Parkinson's disease," Says Henning and continues.
"One is the exhaustion, the other is the balance"*

"And that is exactly where the insoles that Medicovi recommend can be used."

"When I had the insoles in the shoes, it turned out quite fast that the pressure under the foot was distributed better on the ball of the foot, which means that the exhaustion is not as devastating, as it normally would be"

"Secondly, when I tested it for balance, then it turned out that the balance was actually far better. I could, compared to what I have been able to previously, stand on one leg, and that was a very satisfying feeling to get"



Inge Holst Sørensen is 66 years old and was diagnosed with Parkinson's in 2009.

Inge had big problems with getting out and walking, which she really wanted to, without hurting the legs and calves.

“After using the insoles for a month, I can walk close to 7 kilometers – and I can walk on cobblestones without feeling anything in the feet or calves.

They have helped me greatly – both with the balance, but also with my sore feet and legs”



Inge's husband Kurt explains.

"We always walk hand in hand, so I can support Inge"

"Before Inge started using the insoles, I could clearly feel in my hand that Inge needed this support"

"At the same time, when we walked into town, I had to always make sure we walked on even surfaces. This meant that we sometimes had to make big detours off to the side of the road or sidewalk."

"After Inge started using the MEDICOVI-insoles, I can no longer feel Inge's balance complications in the hand, and we can walk everywhere in town, without having to consider the paving of the road"

This is how the hydrodynamic insoles improve the balance

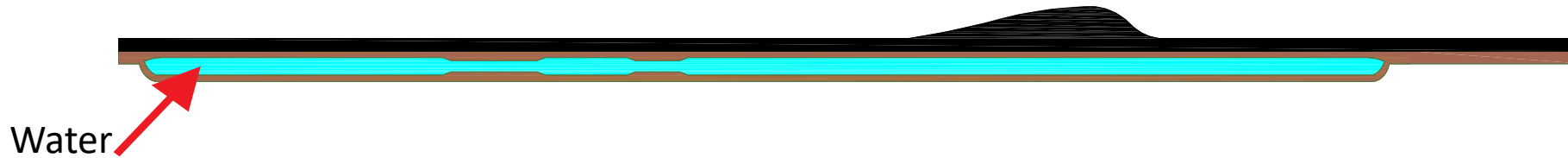


MEDICOVI-insole provides an ultra-fast effect on the sensory nerves of all the fingers



Here, you can feel the effect on the sensory nerves of the fingertips in the red area.

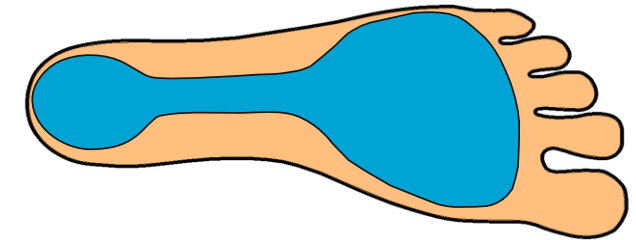
This is how the hydrodynamic insole improve the balance



It is the special patented construction of the water-filled membrane which creates the ultra-fast and enhanced physical effect of the sensory nerves of the sole of the foot.

We use water in the insole, because water, as opposed to gel, has the necessary fast flow behavior, which makes it possible to activate the sensory nerves fast enough **to improve the balance and prevent falling.**

Unlike other insoles filled with fluid, the sides of the insoles are constructed of a membrane of very stiff foils that contains the water. During duress, the insoles will then develop such a great hydraulic pressure in the water, that a water film is pressed in under the surface of the sole of the foot. This will affect a great amount of the sensory nerves with even the smallest movement of the body.



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The balance improving ability of the MEDICOVI-insoles are scientifically confirmed through a study made by the Center of Sensory-Motor Interaction, University of Aalborg, under the direction of

Prof. Pascal Madeleine og Prof. Uwe Kersting

This scientific study documents the mechanic or automatic, static and dynamic balance-improving ability of the MEDICOVI-insoles.

Measurement of the balance



Electronic
measuring-insole

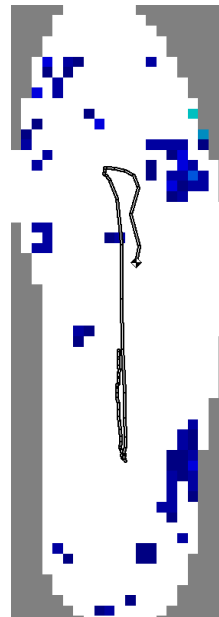
We measure the balance with electronic measuring-insoles. We measure the change of the “center of pressure”, which corresponds to the body’s center of gravity, projected down onto the surface of the foot.

A measuring program performs a calculation of the “center of pressure” 70 times per second. Thereafter, the program deposits a mark on the picture of an illustrated foot. 70 small marks is deposited per second, which develops a curve. This curve displays the measurement of the right foot in the drive of the professional PGA golf coach Claus Valter.



Claus Valter’s drive

Golf shot/drive right foot



We will now show that the hydrodynamic insoles’ balance-improving effect is so ultra-fast that the insoles can improve the balance of Claus Valter in the act of performing the golf swing, which only lasts 0,8 seconds.

It can be problematic for a particularly disabled Parkinson’s patient to evaluate the situation of their own balance as relevant in comparison to that of a top athlete. However, the example clearly presents the significant balance-improving effect of the MEDICOVI-insoles.



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PGA golf coach Claus Valter



Claus Valter's drive or swinging movement takes ca. 0,8 seconds.

The balance measurements clearly demonstrate that the MEDICOVI-insole can regulate the balance within milliseconds. The only difference between the 4 drives being Claus Valter changing between wearing MEDICOVI-insole and the ordinary golf-insoles.

With MEDICOVI-insole, the figures are almost identical, which indicates a great consistency and security in movement and therewith a good balance.



2 drives with
MEDICOVI-insole
superimposed on
each other.

2 drives with ordinary
golf-insoles
superimposed on
each other.



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PGA golf coach Claus Valter



Claus Valter's drive or swinging movement takes ca. 0,8 seconds.

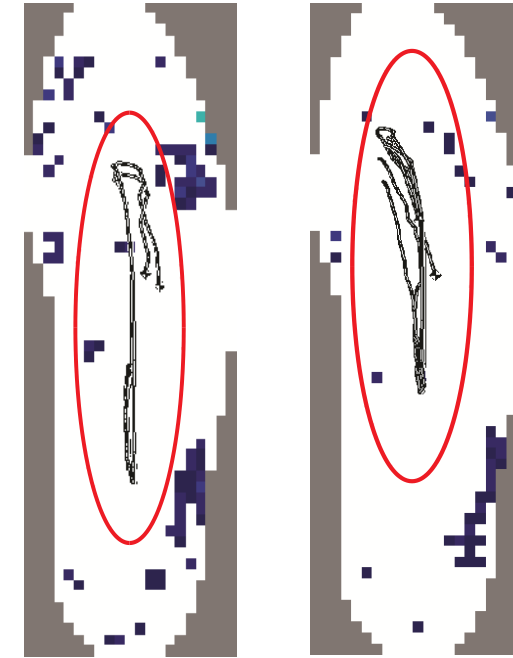
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MEDICOVI-insole provides therefore Claus Valter with a significantly improved balance during the drive.

Notice that the golf swing takes 0,8 seconds. Within this very limited time frame, the ultra-fast water-movements in the MEDICOVI-insole manage to improve the balance in every single small micro-movement during the completion of the golf swing itself.

This extremely fast reaction time within milliseconds is an absolute necessity when the insoles need to prevent falling and improve the balance for the Parkinson's patient.



2 drives with
MEDICOVI-insole
superimposed on
each other.

2 drives with ordinary
golf-insoles
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each other.

Whereas the figures for the ordinary golf-insole has greater discrepancy, which is an indication of variable movements and greater insecurity.



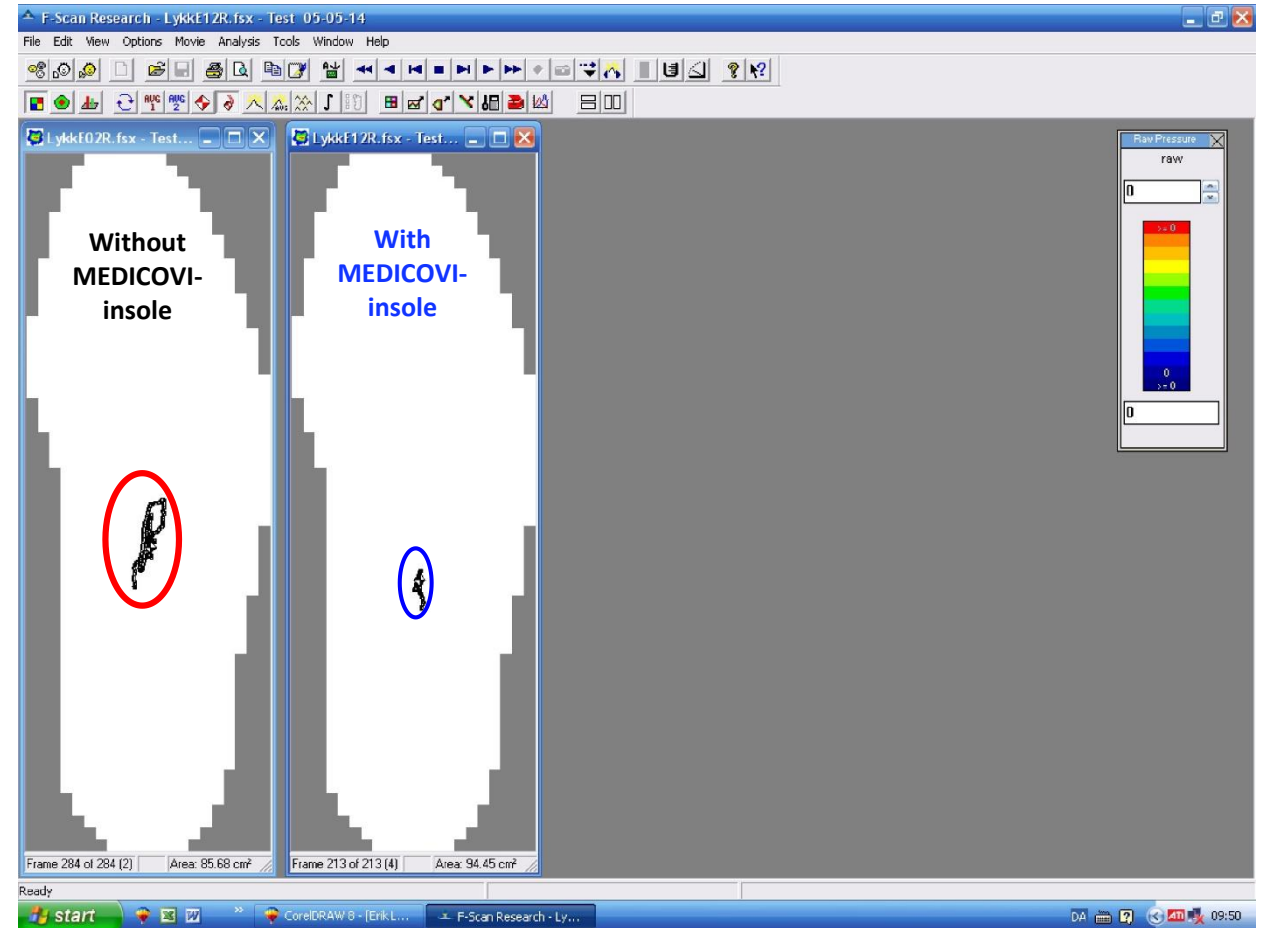
We will now show a few balance measurements that we have conducted on some Parkinson's patients, with and without MEDICOVI-insole.



Erik Lykke is 80 years old and have been diagnosed with Parkinson's for 18 years.

We measure the balance while Erik balances on his right foot only for 3 seconds. First without MEDICOVI-insole and immediately following with MEDICOVI-insole.

It is evident that Erik achieves a better statistical balance on the right foot with MEDICOVI-insole, because the balance-figures are significantly smaller in the measurements with MEDICOVI-insole.



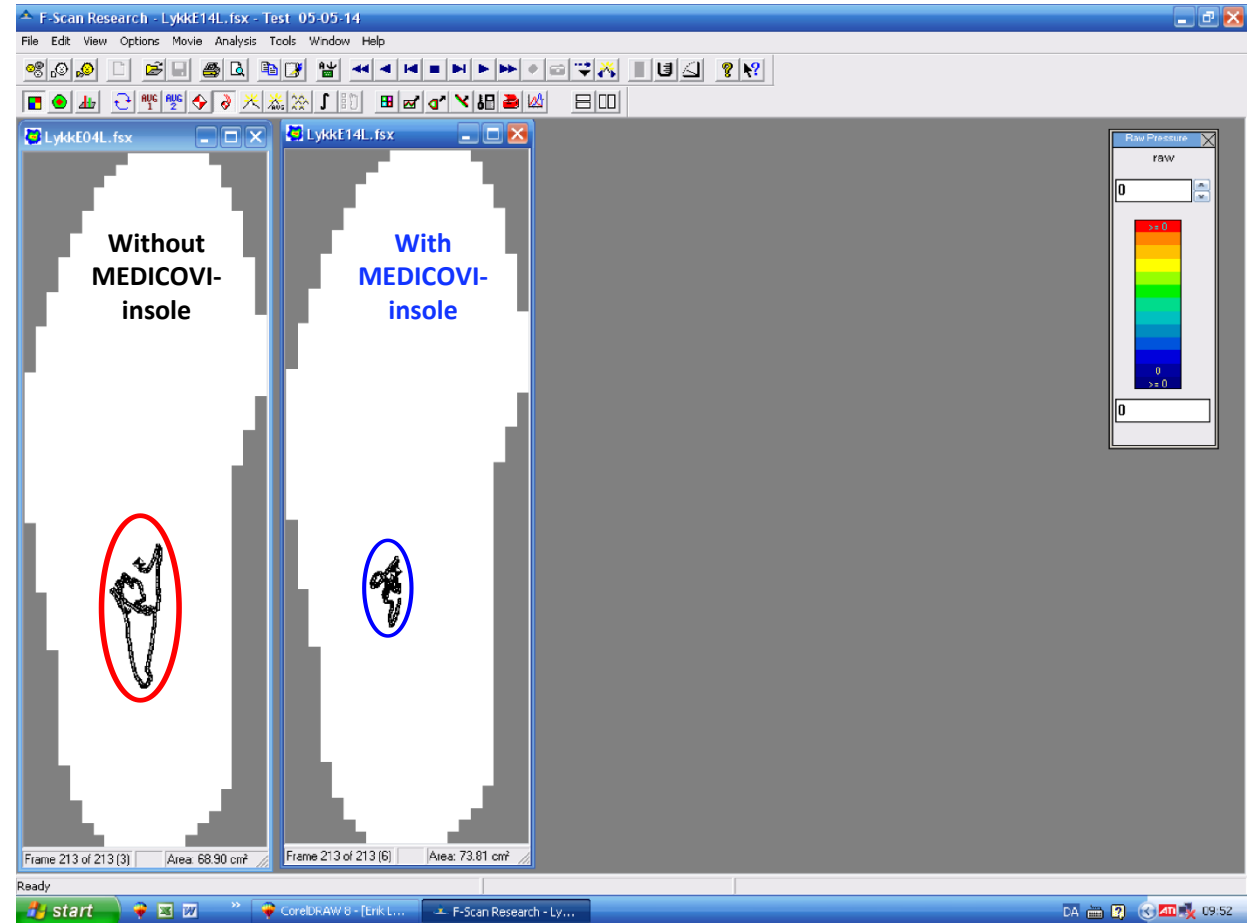


Here is shown the balance-measurement for Erik, standing on left foot.



Erik Lykke is 80 years old and have been diagnosed with Parkinson's for 18 years.

The balance-measurement shows that Erik also achieves a better statistical balance with MEDICOVI-insle on the left foot.





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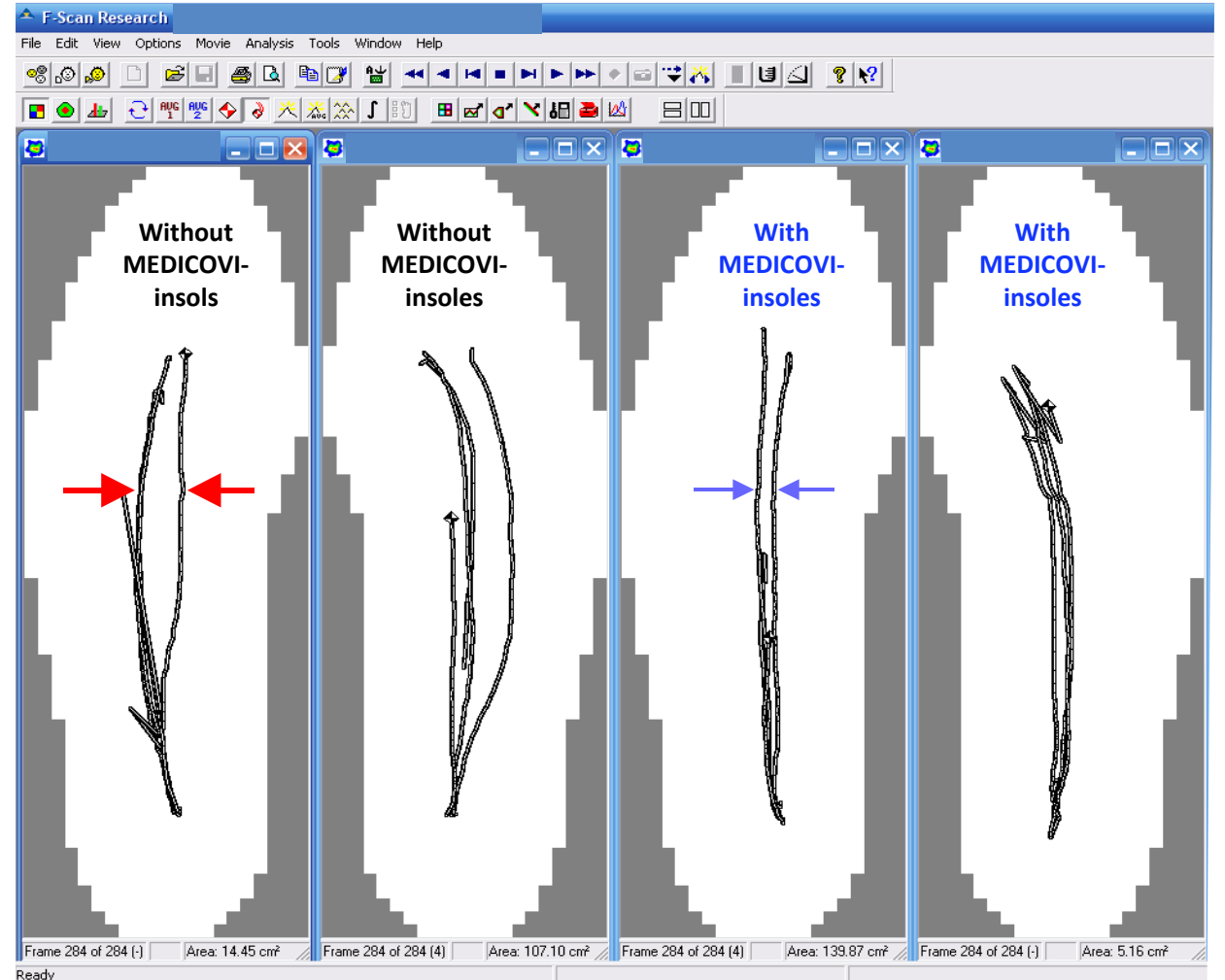
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Henning Frederiksen
blev diagnosticeret med
Parkinson i 2013

This measurement was conducted while
Henning was walking normally for 4 seconds.

It is evident from the measurement that
Henning achieves a significantly better balance
during walking with MEDICOVI-insoles, because
the curves are closely aligned in the
measurements with MEDICOVI-insoles,
compared to the measurements without
MEDICOVI-insoles.





Based on the personal experiences of Parkinson's patients and the many shown balance measurements we have conducted, it is evident that the MEDICOVI-insoles can improve the balance of patients suffering Parkinson's disease. This was naturally expected based on the scientific study from Aalborg University.

The benefits of the balance-improving effect will naturally depend on how the disease has developed and how the general physical condition is.



Besides the balance-improving effect and the reduced risk of falling, the better balance also brings about a lessened tiredness when walking.



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The development of the hydrodynamic insoles has opened for completely new and dynamic orthopedics. The balance-improving ability of the insoles leads to a great relief of pain in the ball of the foot and heel, as well as significantly relieves the knee, hip and back.

The hydrodynamic insoles' great pain relief has been of even greater value to many patients than the balance-improving effect, which is natural. If you are in pain when walking or standing, the pains will always weigh heavily and the pains will reduce the freedom of movement.

Hereto comes that the insoles increase the blood circulation in the foot and sole of the foot, as well as prevent the development of foot ulcers.

Collectively, the hydrodynamic insoles provide a very great comfort.

