



WINTECARE®

MAGAZINE



FOCUS ON

International Developments
Sport Achievements

Clinical Cases

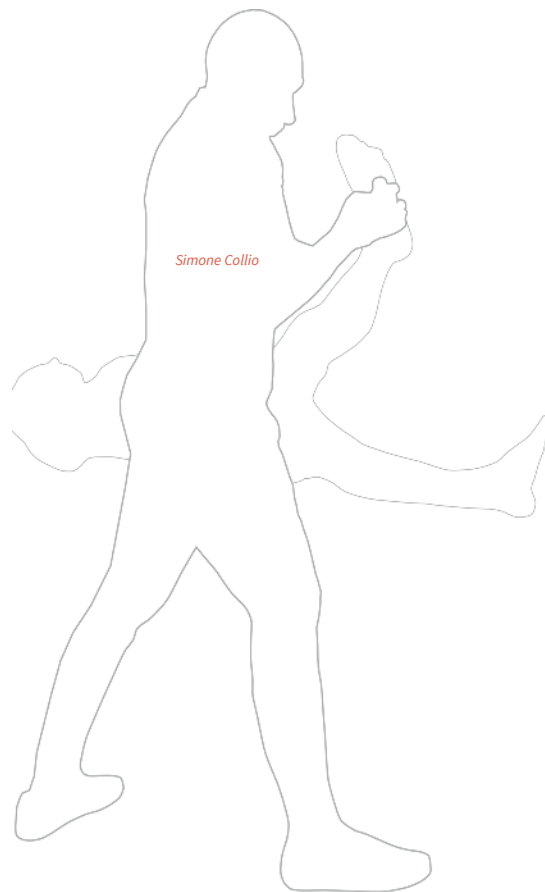
New Entries

Scientific Research

Meet the Team

Technology Achievements

Our Performance Division Coordinator





***D**ear reader, we welcome you to WINTECARE Magazine!*

The idea behind this new tool of communication is to feed the professional ambition of those who follow us, through consistent examples of clinical cases and research work coming from different parts of the world.

We constantly receive questions regarding treatment insights, new methods, development ideas, bibliographic sources, sector trends but it is not always possible to get in direct contact with the multitude of professionals who have chosen WINTECARE as a development partner for their profession.

Traveling worldwide between clinics, medical practices, sport events, universities and health care fairs, our team is daily in contact with a multitude of information, ideas, insights and data. A portion of this value is accessible through our training courses, but from today, through this Magazine, it will be possible to share such useful contents with a much wider audience.

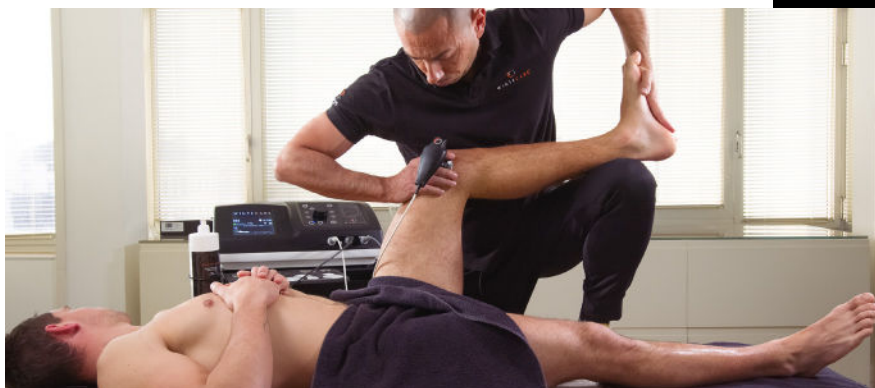
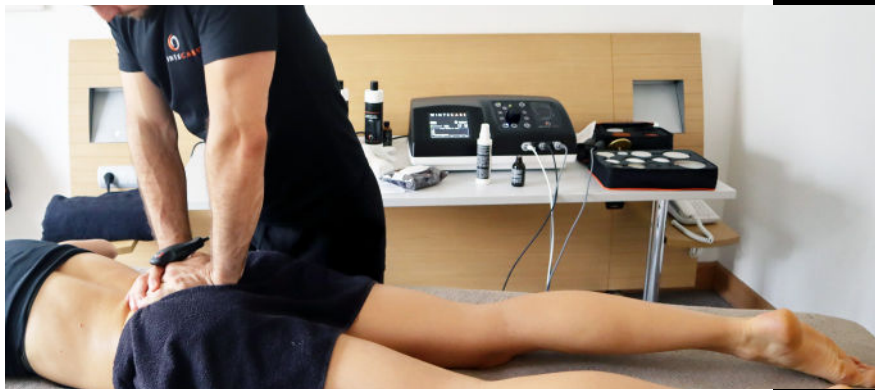
In this magazine you will find a selection of “up to date” articles useful for obtaining:

- ideas on cutting-edge treatments;*
- development patterns for your clinic;*
- terms of comparison for your daily practice;*
- updated insights on scientific research;*
- a source of inspiration for your professional growth.*

Reading WINTECARE Magazine means joining a new movement that pushes medicine to deal not only with “pathology”, but also with quality of life and performance.

Thank you all.

Enjoy the reading!



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The multisystemic approach - a new perspective of treatment

by Simone Luca Binda

Physical therapy helps functional recovery from musculo-skeletal diseases, trauma and post-operative conditions in a non-invasive way, without altering the biochemical balance of the body.

Professionals use specific equipment based on energy transfer to stimulate a therapeutic effect within the tissues.

A crucial gear of our job is to understand the cause-effect processes of this medicine branch and make the resulting knowledge available to healthcare professional.

Our end goal - says Simone Luca Binda, founding partner of WINTECARE - is to convey effective, sound and quick treatment solutions to therapists dealing with different type of patients and pathologies. It is an extremely challenging target but that's what we fight for.

In this light focusing the attention just on one product may become a limit that need to be cleared.

Human Body is an extremely complex structure with amazing interconnections among several systems as circulatory, neuromuscular, endocrine, digestive, etc...

That's why we have launched in 2020 - with the cooperation of the Universidad International de Cataluña - the concept of "Multi Systemic Approach": treatment science targeting different body systems to achieve higher results and taking into consideration the above-mentioned body system interconnections.

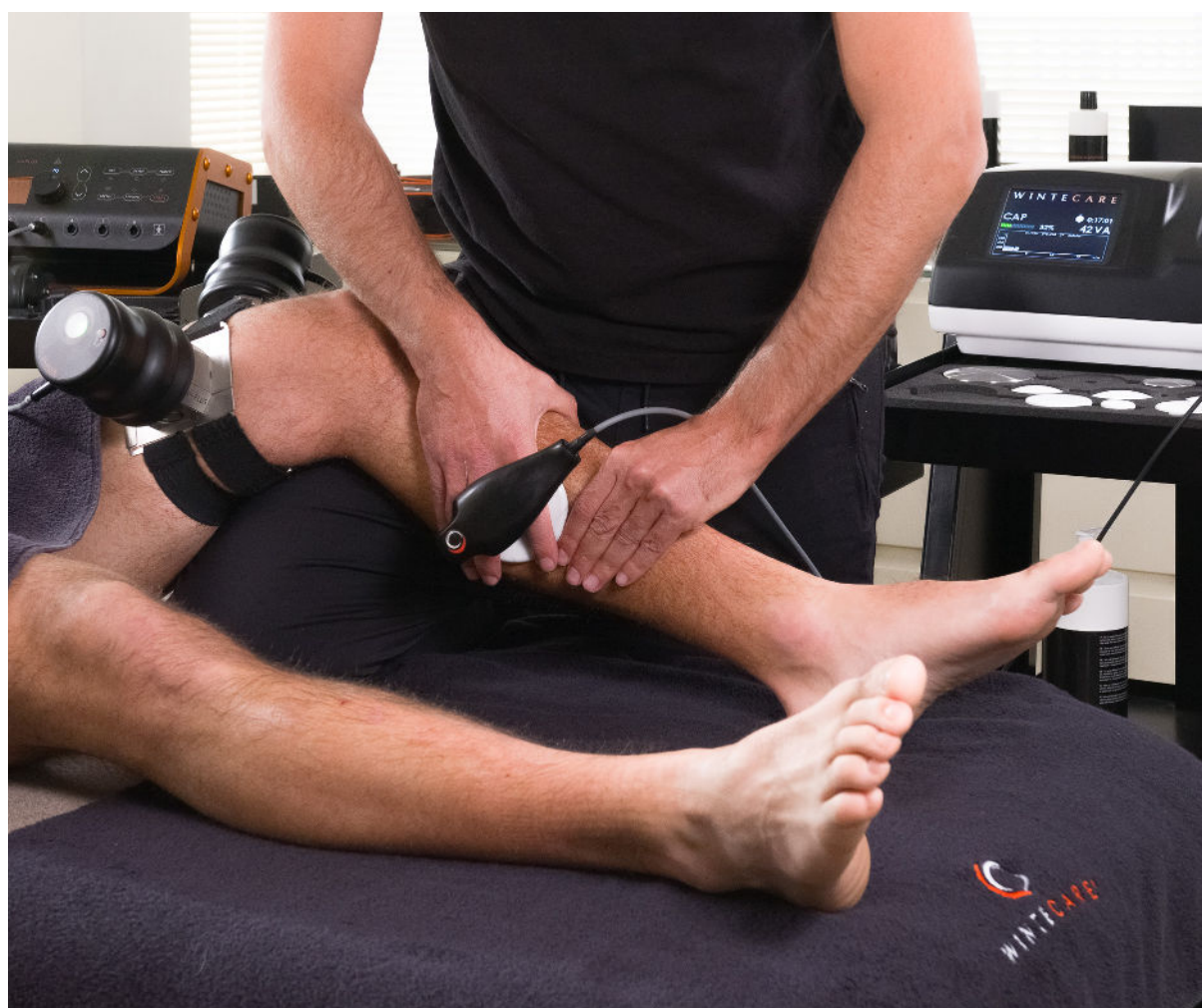
On one hand, T-Plus helps the therapist to "heal" tissues and foster circulatory responses supporting organs health, on the other hand V-Plus clears the communication pathways between the Central Nervous System (CNS) and peripheric structures: the result is a healthy tissue immediately available to the CNS to be better controlled.

Time is wealth, and shortening the time needed to achieve the therapy objectives generates value for both the patient and the therapist. Working simultaneously on two body systems gives the opportunity to save weeks or even month along the way especially when the pathology or the injury is serious.



Take the example of an Anterior Cruciate Ligament rupture. After surgery the patient faces pain, swelling, Range Of Motion limitation and especially in the first days he/she is forced to bed. The great challenge of his/her recovery is rather the restore of normal body function rather than just tissue healing. Taking care of the inflammatory process and support tissue regeneration is one part of the therapist job but poor movement imply the loss of motor pattern and force the neuromotor system to “switch-off” the communication pathways between the CNS and peripheral motor units. What at the beginning is a body defending reaction becomes a limitation in the long run. Gaining back motor patterns and recover from muscle atrophy is a tough job. That’s where V-Plus gets on stage: an early and safe stimulus to the CNS to keep active the communication with peripheral motor units of quadriceps, hamstrings, calf and peroneal muscles. That will shorten the time needed for the patient to get back to a normal life by slowing down atrophy, keeping muscle strength and coordination. That’s how a specialist save time along the recovery trip!

Such example is applicable to many other musculoskeletal conditions and WINTECARE is at the forefront to identify the best practice for each therapist challenge.



Enrich your experience as a WINTECARE specialist - meet Gabriele Bertelli



What does it mean for you to be a WINTECARE specialist?

Being part of the group of WINTECARE specialists is a privilege, but also a constant challenge.

It's a privilege, not only for the role, but above all for the possibility I have of being able to travel and participate in the most different experiences such as assisting and treating elite athletes in international competitions.

It's a challenge because it is always necessary to know how to be updated, improve and adapt to the new working situations as treating athletes of any discipline, running short of time, dealing with different environments, training other experienced therapists.



What do you do, as a WINTECARE specialist, when you participate in a sporting event?

WINTECARE allows you to live so many different experiences: working in corporate welfare, in the sport world, in huge promotional events and training other therapists through webinars and seminars.

In my personal experience, I had the opportunity to work on corporate welfare, training and sport. With respect to what has been done in sport, we may divide the events into 2 categories: seasonal international meetings and major events that happen a few times in life, like European & World Championships and Olympic Games. During the season the athletes have an easier approach in testing their condition and trying more treatment methods. During major events the pressure is much higher and the difference in the final result is made by the details: concentration, power, reactivity, fluidity... We try to work on those details that make the difference. In recent years, being part of the WINTECARE team, I joined various events: I have been the therapist of a women's volleyball team in A2, I have participated in various meetings of the Diamond League track and field circuit (London, Paris, Rome, Brussels, Birmingham), I was able to support the elite athletes of 2 Major marathons (Boston, Chicago) and that of Milan and I participated as a therapist in the American trials for the Tokyo Olympics. The most particular experience was certainly that of the Ras al-Khaimah half marathon, in the United Arab Emirates. I was struck both by the city, very different from our Western style, and by the climate breathed by the world situation. In fact at that time Covid-19 was exploding and therefore that was the last "breath of fresh air before being confined to my house for several months.

How being a WINTECARE specialist affects the patient feeling about the treatment?

The ongoing innovation in materials and technologies allows me to always be at the forefront in terms of patient support. Not only that, there is a continuous exchange of thoughts between us - specialists - in order to better address new problems in relation to their experiences. We try to welcome the patient with the best technology, the widest competence and the sincerest smile. The sooner the patient achieves his goal, the happier we are.



Does attending WINTECARE backed events help you in your daily work?

The possibility of dealing with almost perfect bodies like those of elite athletes with impressive reaction times gives an immediate return on the treatment impact on their biomechanics and feelings. The possibility of transferring the acquired experience with them in my daily practice is certainly an advantage that other colleagues do not even imagine. At the same time, the patient realizes the greater competence of the therapist who took care of him.

Why having access to a WINTECARE specialist during a sport event is a game changer for athletes?

As already mentioned above, we want to be the icing on the cake of the athlete's final performance. We are lucky to belong to a selected group and this is a plus because the athletes know what to expect from the treatment and sometimes even from the specialists themselves. Over the years we get to know each other and we know what the specific needs of each athlete are. By doing so, we established a relationship of trust and confidence together that allows the athlete to feel at home in every part of the world, as if he/she had his personal trusted therapist always by his side.

What does it mean to follow an athlete during the training season?

This is a privilege and a great responsibility. A great empathy must be created between athlete and therapist. This feeling increases in relation to the time and experiences the two spend together. After a while, the therapist acquires a better understanding of the athlete's body responses even without speaking. Then there's another fundamental aspect to be taken into consideration: the mental approach. It is not possible to have good results without having the stress kept under control. From this point of view, the therapist who comes into close contact with an athlete can also feel their pressures, fears and within the limits of his skills and attitudes will try to guide him to a better condition.

When an athlete achieves a good result, do you feel part of that victory?

Sure. Therapist and athlete become part of a unique and cohesive team after working and sweating side by side. The athlete sweats on the track / gym, but I guarantee you that the therapist sweats a lot on the treatment table to fix all the problems that arise during training and season. Sometimes it happens instead that

this joy is the result of a more spot collaboration. It happened to me that during an event on the race day a top athlete arrived stuck with back pain. After the treatment, the athlete managed to compete and distance himself from his direct competitor. I saw him in the hotel after the competition, he ran to hug me to thank me. It's because obtaining results costs athletes so much effort and hard work, they do not forget the people who help them achieve their goals during their journey. Therefore, it is difficult, but the final satisfaction is worth much more than the many hours spent in the treatment room. However, empathy remains a fundamental element and the best results are always obtained with a smile.





The importance of the synergy between medicine and physical therapy

by Simone Collio

During my professional career as a sprinter I was supported by a team of specialists in achieving the goals I had set for myself. The two most important figures, in addition to the coach, were the physiotherapist (PT) and the Medical Doctor (MD). MD is the one who is responsible to develop a diagnosis in case of injuries or problems associated with all the structures of the body, and to identify the best strategy to solve it. Among the various therapeutic possibilities there is also the conservative one which - in professional sport - turns out to be one of the most effective, entrusted to the PT. Once the MD has set the diagnosis, the PT must be able to draw up the "functional diagnosis" - or functional physiotherapy evaluation- which aims, among other things, at identifying which tissues, joints, postural dysfunctions and other physical causes determine the onset of the problem.

It is a synergy path where the two professionals periodically communicate and where the athlete's feedback, supported by careful diagnostic checks, remains the cornerstone for achieving therapeutic success.

As a sports PT I cooperate with various MD; I have learned, over the years, that a correct diagnosis is the turning point for optimizing the rehabilitation process of an injury, especially when we are talking about skeletal/joints problems.

Certainly, in the case of muscle/tendon injuries it is important to highlight the type and degree of the lesion, but when the athlete, for example, suffers from bone overloads such as stress reaction, microfractures, spongy edema, degenerative cartilaginous tissues or joint impeachment the knowledge of the MD makes a difference.

It happened to me to treat a tibial microfracture with -initially misleading- diagnosis of tibial periostitis. Two completely different pathologies that required opposite treatment strategy. Obviously, the therapeutic result was disappointing and the athlete took twice as long to recover from the injury. In the same way I have been able, more than once, to recover in extremis athletes who had to participate in important international events and were injured close to the event itself.

The combined and constant information exchange with the MD was a great help to me, both from the diagnostic check and from the technical point of view; a careful analysis of the biomechanics of the athletic gesture, together with the coach, allowed us to correct certain aspects that was leading to



overloading the injured areas, also with the support of drug therapy which, in some cases, it remains indispensable.

Another aspect to keep in mind is the communication between both professionals, starting from the assumption that anatomy and physiology are two well-known topics by both MD and PT. When entering in the area of post-surgery rehabilitation, MD should be able to support the PT in the rehabilitation process, both with regard to manual and physical therapy which, usually, is performed by the PT but where the MD can provide precious insight about body requirements in the different phases of rehab.

Just recently I followed the rehabilitation of a triple jumper who faced a minimally invasive surgery with nanoscope technology – a new generation arthroscopy. She was suffering from severe knee pain due to thickening of the synovial plica. The surgery was a combination between modern techniques associated with the bone marrow removal aspirate from the proximal tibia with subsequent processing to isolate mesenchymal stem cells (MSCs), which were then infiltrated at the end-articular level - in post arthroscopy - with the aim of improving the tissue regeneration. I have been personally present during the surgery, and after that, I coordinated daily, in the first weeks of rehabilitation, with the MD who performed the surgery.

The rehabilitation process followed several steps with a first part carried out in the swimming pool, then a gradual strengthening of the muscle groups involved, the recovery of the proprioceptive system, before returning to the track for the re-conditioning - where the athlete returns to perform all those technical movements that reproduce the athletic gesture.

Concerning medical devices, I was immediately advised to use Capacitive Resistive Energy Transfer -in this specific case was a T~Plus by WINTECARE- with the aim of first draining and then oxygenating all the tissues involved Focal Vibration device -V~Plus by WINTECARE- support tone and trophism of the knee stabilizing muscles. A selective high-power laser for the inflamed patellar tendon. The physiological ROM was recovered very quickly.

During the three weeks rehabilitation, a further intervention by the MD was necessary who performed a triamcinolone 40 mg intra-articular infiltration; And in two specific circumstances he advised me to change the angles and the overload weight, to accelerate rehab time.

This cooperation allowed the athlete to recover the functionality of the operated knee, with free pain, in about 6 weeks, demonstrating how a combined approach between MD and PT is an added value where both professionals, respecting their roles, work with the unique aim of achieving, in the best way and in the shortest possible time, the optimal therapeutic result.



The experience of doctor Francesco Corsetti

Doc. Corsetti, how would you describe “physical therapy”?

Among the various therapeutic possibilities aimed at treating joint, muscle or neurological pathologies, physical therapy represents a valid option; it is characterized by the transfer of energy, in different forms -electromagnetic, thermal, acoustic waves, etc.- to human tissues. This energy is capable of generating biological responses that are exploited in the context of rehabilitation.

When is it indicated?

It is indicated in all painful joint and muscle pathologies, both inflammatory and traumatic, but also in many neurological pathologies.

What benefits does it bring to the patient?

Physical therapy is able to reduce or eliminate pain that is very often associated with joint, muscle or neurological pathologies and it is also able to recover from functional limitation speeding up recovery times.

How the physician and therapist benefit from physical therapy with respect to their professional goals?

Physical therapy is very useful as it is able - both stand alone and integrated with other therapies - to achieve the desired result more quickly and effectively.

What are the advantages over other types of treatment as drugs and, surgery?



The main advantage is represented by the “conservative” approach towards the structure affected by the disease. On top of that, physical therapy does not present the side effects that instead characterize many drugs.

There are different types of physical therapy: which are the main ones and how should the patient identify the most suitable for himself?

Physical therapies are grouped according to the type of energy used and therefore from its source. The most important are tecar, laser therapy, shock waves, magnetic fields and vibratory energy. In order to make choice in identifying the most suitable physical therapy for his problem, the patient needs an evaluation by a specialist.

We often wonder how medicine can help people improve their quality of life as well as deal with pathologies. What role does physical therapy plays in this context? Are there specific physical therapy that are more suitable for this purpose than others?

Medicine is normally seen as a science capable of healing someone when there's a pathology but in reality, today it can also be focuses on the possibility of improving the quality of life and longevity, in particular through the implementation of protocols aimed at the preventing many pathologies. In this light, physical therapy helps to prevent exacerbations of numerous musculoskeletal diseases that can very often negatively affect the quality of life and psycho-physical well-being. In my opinion, therapies such as tecar capable of allowing a significant energy transfer in human tissues without generating painful symptoms or exacerbations are more suitable for achieving the goal of a better quality of life.

Based on your experience, what are the key success factors of a therapeutic program based on physical therapy?

First of all, by the correct diagnostic framework and consequently by the correct therapeutic choice and subsequently by the therapist's knowledge of the applied tools. It is fundamental to “modulate” their use based on the correct timing of the rehabilitation process. Therefore, diagnostic, the choice of the correct physical therapy and its adequate application are the three main factors affecting the end result.

Pushing beyond human limits: Rally Dakar

by Elisa Stoppaccioli

12 stops, 8000km across the desert, 12 days of racing in the toughest conditions on Earth experiencing extremely high levels of adrenaline and testing the limits of the mental and physical conditions of the athletes: Rally Dakar. A challenge that goes far beyond the ordinary concept of performance. What does it mean to race in an event like this? What does it mean for the human body and spirit? It is not like any other motor sport event, you race for thousands of kilometers in the most hostile conditions: from the freezing early morning hours, baking temperature on sand and rocks all the way long. It is a multi-discipline event so it's not just a car race, there are also motorbikes, quads, trucks, side by side cars who race across the desert and anyone can take part of it, as long as he/she is over 18. So, men and women compete against each other with also amateurs and professionals; the combination and the atmosphere among the competitors is unique.

The desert setting is magical because in complete silence, in the middle of nowhere, suddenly you hear motor engines making



noise on the sand for a few minutes and then you're back to silent till the next pilot.

The preparation and training before the competition is really huge and involves a lot of different components of the team. You have to be ready to face any kind of condition and also be prepared for unexpected situations, racing during the day and night. It is also an adventurous experience. The first days of racing are for sure the easiest, at least because the athletes are full of energy and motivation, then when the days pass they become really tired and having an effective recovery program becomes strategic in the planning of the steps of the race.

The race itself is like a moving circus, each night in each step the teams build up a camp where they stay together: mechanics, team managers, drivers, physio, etc and all the "machine" move down the path followed by the drivers/drivers. During the days, all the team go through a lot of rough moments especially if we think about the riders: they start racing at 3 am till 4pm after going through dunes all day. That's quite a long time to be alone through all these things obstacles and the for the "athlete" it's also very difficult to stay focused on not getting lost along the track.

What really makes this race unique is not just the incredible distance covered, but actually the setting, the desert, the sand and all the challenges that come to battle during the race. How could you concentrate for the rally with all these things to overcome? It's for sure quite stressful and you can do it just if you follow regular routines, have a consistent recovery every day and try to stay focused on the route.

Most of the athletes prepare for this race throughout the year, where endurance and strength are fundamental, to be healthy is extremely important. At the same time getting injured is a real risk. That's why recovery and prevention programs designed by WINTECARE were a fundamental support for the pilots and the crew of the Spanish FN SPEED TEAM, our partner in this amazing experience, captained



by Santi Navarro. Our team made by Claudio Freti, general manager of WINTECARE SA, and Segio Garin, general manager of WINTECARE España SL, had the opportunity to join the official presentation of the 2022 FN SPEED TEAM in Girona in October 2021 and to briefly experience themselves what does it mean being an extreme copilot, with an exciting ride on a side-by-side car. Their experience was nothing compared to what is competing in the Dakar Rally, but it was enough to let them be conscious about the effort a pilot can suffer and how much could it be beneficial having the T~Plus device packed and ready to travel with the team.

It's commonly heard within the world of sport that recovery is just as important to an athlete at the time spent training, in this race this is even more true. If you fail to adequately recover and "repair" the muscle soreness caused by all the efforts, hits, fatigue of driving and riding for thousand miles a day you risk to compromise the performance of the following day and, in the worst case, get injured.

With the possibility to stimulate blood perfusion and an increase of endogenous temperature in deep tissues T~Plus helped the therapist of the team, Pere Palmada, to support his team – FN Speed - for this huge race: actually, it was a key success factor! success of the team.





In the heart of alpine skiing: meet Fabio Truaisch, the physiotherapist of the Swiss Ski National Team

Tell us briefly about your experience as a physiotherapist and in particular about your job with the Swiss men's slalom team.

My professional collaboration with Swiss Ski started in 2010 and at the beginning I worked with the team 100% of the time. During the years I played various roles as a physiotherapist and athletic trainer with the world cup teams of Giant Slalom and Special Slalom.

In the latest 2021/2022 season, I received an assignment as head of physiotherapy for the Men's World Cup Slalom Team.

In addition, I am the sports physiotherapist of the Swiss army (Armée Suisse), under the Komp. Zen SportA (Komptenzzentrum Sport Armee). At Beijing 2022 Winter Olympics, I was part of the Swiss Olympic team as a sports physiotherapist; following one of the strongest alpine skiing teams in the world. It was a great honor and allowed me to add an important experience, one of a kind, to my professional background.



What are the biggest challenges of working in big events like the World Cup and the Olympic Games?

One of the main challenges is facing different ski geographical zones between Europe and North America, so there are many trips to be made. On average, between November and March, people were away from home for about a hundred days. Surely all these travels negatively affect the quality of sleep and the athletes' sport performance, who are subject to different time zones and long journeys. On top of that, from 2021 the very severe restrictions due to covid19 had to be added to the pack. That kept us from having contacts with external people even though we were forced to perform PCR tests on a weekly basis.

As for the 2022 Winter Olympics, they took place in Beijing, more precisely in Yanqing, with the disciplines of alpine skiing and bobsleighbing.

Due to the progress of the pandemic situation, the Olympic participation was pending until 2 weeks before the event, but the thrill was then rewarded, by the huge experience. An episode that I remember with pleasure is certainly the moment in which I met an athlete from Colombia

named Michael Poettoz, whom I had met in November in a training camp in Swedish Lapland and whom I had rescued following a very serious accident. When I met him, he thanked me for the prompt intervention which, according to the doctors, saved his life, since the ski station where we were was 3.5 hours away from the first hospital.

Which parts of the body are mainly involved from a treatment point of view and which are the most frequent injuries?

Alpine skiing is a particularly traumatic sport for the Musculoskeletal System and therefore the physiotherapist is very stressed on post-traumatic recovery interventions. Athletes can run into problems related to the overload of the musculoskeletal system in addition to typical injuries.



Events of technical nature, the equipment, snow conditions, psycho-physical condition, stress and other variables affect the overall injury risk. The part of the body most affected by overload remains mainly the lumbo-sacral segment and the coxo- femoral joint.

How does the work of a professional ski team therapist differ from a clinic practice?

Mainly the comparison with different professional roles playing around the skier such as ski and boot technicians. They are focused on evaluating variations on ski edges or boots insoles: these are variables that can affect the overload related pathologies of the musculoskeletal system. Another important person impacting on the psycho-physical balance of the athlete and consequently on the therapist approach is certainly the athletic trainer. From the discussion with this figure on the training and performance of the athlete, important information is obtained and need to be considered for the treatment program.

Traveling with the team makes my work very dynamic and different from the one in the clinic. For example, it concerns the whole process involved following the athlete injury. In that situation, the physiotherapist must prepare the of athlete pick up in accordance with doctors, rescuers and coaches often in difficult weather and environmental conditions to manage. In addition, the senior sports physiotherapist of the team has the task and management of the athlete's crisis situations, such as between the first and second heat of the competition. In case the athlete experiences a physical problem such as a joint block of the lumbar spine these treatments normally take place in the Hospitalities where athletes rest and get treated.

Other responsibilities concern the management of doping controls and direct contact with the medical teams who are in charge of an athlete from the injured team, who is undergoing a therapeutic treatment at home. Finally, the senior physiotherapist manages the team's therapeutic team, for example in my case the Swiss ski men's Special Slalom Team.

Having the opportunity to work at the highest levels in sports, it is a useful value to be leveraged even with standard patients in the clinic.



What are the technical aspects you don't have to forget during the treatment and the situations which WINTECARE's technology helped you the most with?

WINTECARE T~Plus has helped me extremely in the management of problems related to both physical overload pathologies and injuries. A practical example of its use is certainly the resistive modality in recovery treatments at the level of the lumbar segment up to the pelvic girdle, gluteal muscles and trochanteric pelvis. The vascularization of the tissues and the endogenous increase in temperature in these points supports and foster the therapist's manual work, shortening recovery times.

I think that the programs developed with WINTECARE for the injury prevention, overloads and tissue regeneration are of vital importance for a good management of the athlete's physical condition.

In my clinical practice during 2021/2022 season, these programs have led to a marked improvement in the clinical pictures of athletes: less overload and consequently injury decreased.

In alpine skiing the most frequent injuries concern the femoral-tibial joint and more precisely the cartilaginous tissues, ligaments and meniscus. Knees are very stressed in these disciplines due to the high speeds faced by athletes in competition and training. Despite the increasingly performing materials the body is always subjected to strong pressure. In my personal experience, the treatments that I managed with the greatest frequency were related to the spine segments: cervical, thoracic, lumbar and sacroiliac joint.



Last but not least, We must not forget the whole series of traumas that involve the head and the central nervous system and the regeneration of the lower limbs by focusing on both the anterior and posterior chains of the thighs.

As I said, this season I had the opportunity to work with T~Plus technology. During the muscle recovery treatments, I used the WINTECARE programs using above all the resistive mode working in the higher range of power. On the basis of the different body structures that I had to work on, I always adapt the power in order to achieve specific body responses such as vasodilation, blood perfusion and drainage.

On the other hand, in recovery sessions for injuries and bruises / hematomas I normally go for capacitive mode with a maximum of 7/8 VA and it was very effective! I was helping draining the waste material accumulated in the interstitial tissues caused by the injury. I also used T~Plus combined with other techniques such as Dry Needling, Manual Therapy and Active Therapy.

What are your goals for the future?

Being able to work with a professional teams of this level and representing 3 very important sports structures in Switzerland such as Swiss-ski, Swiss Olympic and Armée Suisse was an honor for me, but it involved a consumption of so much psychophysical energy.

At this moment, I personally achieved any goal I set myself: I was the physio in an important medical team, I participated in the Ski World Cup circuit and its finals, in the Ski World Championships and in events such as the Olympics as senior physiotherapist.

WINTECARE has given me the opportunity to participate in the World Athletics Championships that will take place in Oregon USA in July 2022 as a WINTECARE specialist; what shall I ask further for?!

A race for European gold: meet Beatriz Jiménez

Bea, tell us something about yourself, your professional experience and your experience as a WINTECARE specialist.

Since I was a teenager, I always wanted to be a physical therapist. I practiced athletics and my first contact with this profession was as a patient and I understood that sport physiotherapy was my vocation. I finished my physiotherapy studies at the University of Alcalá in 2005 and since then I've always been working in the sport environment: with my old school training mates or with the Spanish Athletics Federation, the Spanish Swimming Federation or assisting individual athletes on a regular basis.

I joined the WINTECARE team from the very beginning of the company and this has allowed me to attend major sports events that have given me a wide range of experience, both personal and professional. Furthermore, with WINTECARE I had the possibility to meet the best athletes in the world in a sport that is my passion, athletics. In addition, being an “early bird”, I’ve been exposed to these experiences during the whole evolution of the company so far.

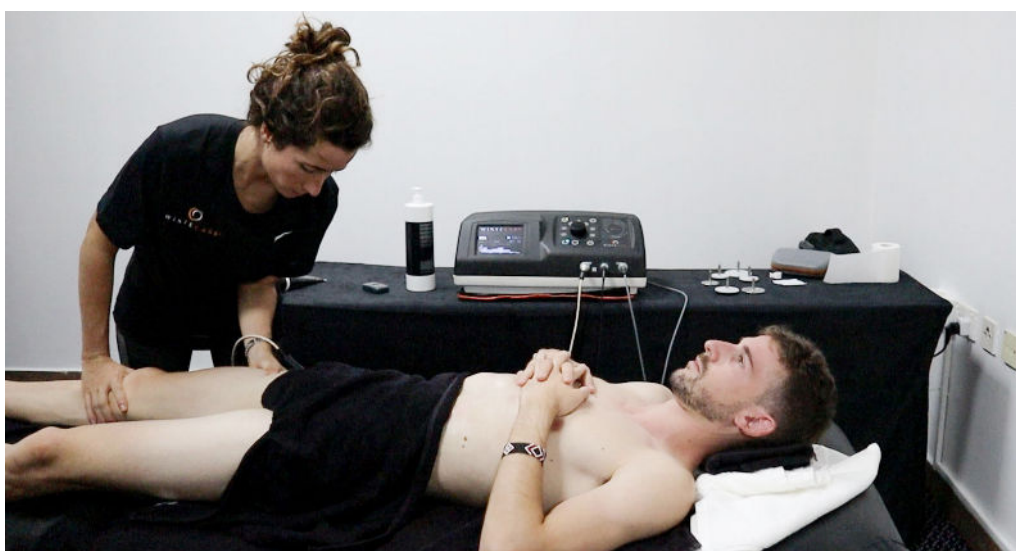
How did you meet Alvaro De Arriba – indoor European champion 2019 - and how did your collaboration start? Tell us your story.

The first time I met Alvaro was at a middle distance event of the Spanish Athletics Federation, back in the year 2015. Anyway, it wasn't until 2017 that I started collaborating with him and his team. At the beginning, I assisted their managers in the management of international competitions and also by providing physiotherapy assistance in the same ones.



How did you manage the fact of working at your clinic and, at the same time, following the preparation of Alvaro's season?

When I started working with Alvaro, I was already living in France and I was working in Monaco. I was my own boss, which made the organization pretty simple. My presence was limited to international meetings and championships, because these appointments are the ones where it's more important to recover properly between a race to another. The management of the logistics of this not routinary life sometimes involved going several weeks without a day off, because meetings often took place on weekends or during the week. Vacancy days from my job were compensated by those which should have been for holidays. I did it because the patients of my clinic, although they were understanding this type of travel, still needed my help and I had to give them the service they required even if this was conflicting with my rest days. In the end, everything requires sacrifice, but the rewards are always satisfactory.



What is the role of the physiotherapist in the training and competition plan of an elite athlete?

Elite athletes have needs that are not the same as those of a sport enthusiastic or any other patient. First of all, they know their body and its feedback in a really conscious and precise way. They know what hurts, when, how and why. They give very detailed information about their pain and needs and this type of information is crucial for the therapist.

Listening to the athlete is the key to successful treatments. When treating an uninjured athlete, our primary goal should always be to improve performance and to prevent overloads. This will provide the athlete with a greater ability to assimilate higher training loads, which will allow him to have better results in the long term.

With respect to the intra-competition work, the game changer is recovery. A professional athlete's logistics can be pretty hectic. The therapist role is very important especially taking care of the side effects of travelling. Jet lag is one of the most common issue to be addressed between one competition and the others.

What are the typical treatments you do the most? What benefits you acquire from WINTECARE T~Plus?

The main treatments with a professional athlete during competitions are the recovery ones, as I said before, although pre-competition treatments are very important when you have to save time and have better feelings during the warm-up. In recovery treatments, I don't usually pay much attention to the treatment time and I am usually guided by the sensations of the athlete.

I usually perform them at the end of the day, as after the race or after training or travel. By the way, the time in pre-race meetings for the treatments is limited, so the input that we want to transfer to the athlete is about activating the muscles, increasing agility and speed, the opposite from recovery. It is important to know how to handle both types of treatment because in the case of a healthy athlete during an event, these are the most commonly required.

Please give us an example of a possible treatment program for an 800m athlete.

An example of how we act during a competition, is the protocol we did during Glasgow 2019, the European Indoor Championships, that took place over 4 days and in which the 800m athletes competed on consecutive days. If the athlete get in the final, he has to compete for 3 races of 800m at his higher intensity. In order to prevent the persistance of fatigue day after day, our plan was to do treatments daily and even several times a day.

On the first day after the travel, I usually make a recovery treatment relax completely the athlete. During the following three days before the race, I perform activation treatments to keep up the athletic condition of the runner. After the race I go back to recovery treatment which helps the body to restore and train again the next day with good muscles and stamina.



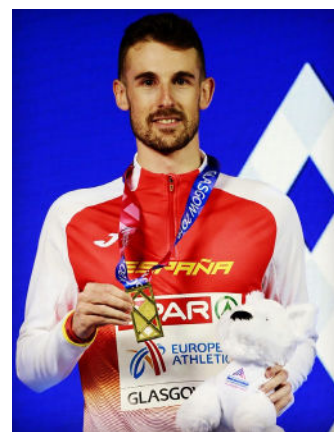
How do you use WINTECARE programs and technologies with professional athletes such as Alvaro? What is the typical feedback you receive after treatments?

Professional athletes, as I mentioned at the beginning, are familiar with their bodies and their sensations. Working with technologies such as the T~Plus allows the athlete to rest and recover well between training sessions and, above all, during competitions like European or World championships, it is a plus to reach the quality that makes the difference in searching the best performance. The day after the treatment I usually receive this kind of feedback «I feel fresh as I didn't run yesterday». In a championship in which the differences between the athletes are very little and the demand of high intensity is what really distinguishes them, It will make a huge difference!

When Alvaro won the European Championship in Glasgow what was your reaction?

Well, I was very, very nervous. Whenever Alvaro competes, I do! But that day we all knew he was going to do something big. I remember the day of the final, before going to the stadium, a journalist told me that I had to go to the stadium, asking for an interview for the next day with Alvaro, and he told me: «I know something big is going to happen today» and I replied: «So do I». I knew it and that made me more nervous than usual.

On the last lap when Alvaro was in the lead, I couldn't even look at him, but when I saw him finishing first, it was a cumulus of joy and emotions all at the same time, I would not even know how to describe them. That moment and the one at the podium with the Spanish hymn playing, was very, very special! Finally, all the hard work was rewarded.



What are your future goals?

In 2022 we have the outdoor season ahead of us and I will try to be present at some meetings with Alvaro, although in COVID times everything is more complicated. In summer there is the World Championship in Eugene and a European Championship in Monaco too, so we have to go for it. This weekend, during the World Indoor Championships in Belgrade, Alvaro has remained at the doors of the medal, with a 4th place, so he has to fight for a come back to the podium this summer.

This season I am also taking part of the world padel tour circuit APT and I will attend the tournaments that will take place in Europe. All this added to the work in the practice, I wish a good 2022 for me, loaded with work and experiences.

Working at the highest level in elite sport: interview with Arash Noor

“In order to be successful at the highest levels in professional sports, you must have a strong passion, perfect knowledge of biomechanics, specific athletic gesture understanding, a great deal of experience and – last but not least - a multisystemic approach.”

These are all characteristics that we find in the Doc. Arash Noor, a specialist who has long been working in high-level sports.

Let's start with a brief introduction: Arash Noor is a Doctor of Chiropractic with a specialty in Sports Medicine. He is also a retired Emergency Medical Technician and a Certified Chiropractic Sports Physician (CCSP). He has been operating his own practice in Los Angeles, CA for the last seven years. Regarding his work with professional athletes, there are two different pulls which led to where he is now: 1st, his mentor Dr. Glenn Lowenberg was a Sports Chiropractor as well. He had been at every Olympic Games as part of the USA Track and Field Medical Team since 1984 all the way till 2008; 2nd, by referrals from non-sports athletes.

The kind of athletes he cares for and work with are several: he has clients from the NFL, NBA, MLB and MLS, but mainly his work with athletes has focused on track and field sprinters (100m, 200m and 400m).



“The work developed with different kinds of athletes is utmost various. If we think about a NFL player the typical needs from a treatment point of view are quick, effective, drug free recovery. I have to be able to prepare an athlete in 6 days. I might compare it to having a patient recovering from a car accident, but instead of treatment regimen over six months, the work is accomplished in six days.

The primary difference with a Track & field athlete involves the physical contact which is predominant in the NFL. You will see more inflammation and edema in an NFL player compared to a Track Athlete. There are other things in common such as hamstring injuries, ankle injuries, back injuries, etc. Another important difference involves available recovery time. In Track & Field you just have more as compared to the NFL. Effective use of WINTECARE can speed times up for both type of athletes, drastically!

It’s in the sports environment, where I got to know about WINTECARE; in facts I have to credit my first track athlete, Tokyo Gold Medalist, Michael Cherry who made the first introduction. Chiropractors are not known for doing soft tissue therapy, but I enjoy doing it because it is an important aspect of movement. Furthermore, I was already using shockwaves in my office, but I always felt there was more to treat than tendons, ligaments and joints. When I was introduced to the T~Plus it blew me away, especially by the rapid pace of recovery. Michael always says for fun, “It is a cheat-code doc! It helps me so much!”



When I introduced the WINTECARE T~Plus into my practice I was hesitant to use it because I didn’t understand the technology very well and also that was an apparent “out-of-pocket” expense since it is not covered by insurance in America. But after some additional familiarization and training it has become my go-to-therapy in my clinic. As one of the first practitioners in America, I have had the pleasure of introducing the technology to my clients and I have increased my income by 30%. I can report also a higher quality of patients who are more likely to prioritize good healthcare. Even my wife has become “addicted” to the treatment and often calls to remind me to bring it home. She sees so much value in it as an overall wellness tool.”

After a while being a valuable and enthusiastic T-Plus and V-Plus user, Doc. Noor started to cooperate with WINTECARE as one of our sport specialists during international events. Tell us something about your experience during the Preclassic Prefontaine and the Chicago Marathon 2021!

“I was fortunate enough to help Michael Cherry during the Olympic Trials. This was my first taste of going to Eugene. I wanted so badly to be on the practice field to help out others, but I was solely there for Michael whom I was glad to assist. It helped me understand what I needed to do for Prefontaine.

Prefontaine was one of the most amazing experiences of my career. Waking up and treating athletes from 8am to 8/9pm in the evening. The hours and work did not bother me once, but goodness, my hands were tired. The one advantage I had was being able to manipulate the spine and extremities. WINTECARE has made it so much easier to mobilize and manipulate the spine and extremities. My mobilizations, manipulations/adjustments have become much more effective and efficient. Some of the track athletes there have never received any mobilization treatments or manipulations/adjustments, so working on them with the WINTECARE and being able to confidently explain how and what I was doing was such a gratifying experience. It was truly special to be able to work with so many medalists I'd only before watched on TV during the Olympics. I hope one day to be lucky enough to be part of that experience again.

The Chicago Marathon was much more relaxed atmosphere than Prefontaine, though no less rewarding. Marathon runners have more white muscle than red muscle so knowing this I had to control the WINTECARE more properly and more delicate with the marathon runners. I did not adjust any spines or extremities, but mobilizations were performed to make sure the joints were moving correctly. The language barrier was at time challenging, but I was fortunate enough to treat both Winners: Seifu Tura and Ruth Chepngetich. They were both a pleasure to work with and I spent my time working with them. Having the opportunity to do all of this in Chicago, one of my favorite American cities, made the trip all the more.”





Technology innovation fostering human skills: cream free and diathermic fibrolysis

by Simone Luca Binda

Cream Free

In physical therapy, energy is used to stimulate body responses at different levels: tissue, circulatory, neurological etc. The amount of energy transferred, how it is distributed in space - body - and how it is dosed in time - treatment duration - influence clinical outcomes and therapeutic time.

In evaluating one device effectiveness, sometimes we are led to think that the instrument category is all we need to know about the device itself. Such simplification leads to misunderstanding such as “a laser is a laser”, “shock waves are all the same”, “one tecar is as good as another”. Actually, these are drastically wrong bias! In other environments, such associations would make one laugh: it's like, for example, saying that the same driver will achieve the same result regardless if he drives a Formula 1 or a standard car. When evaluating a medical device, it is essential to know the relationship between technical characteristics and biological effects.

WINTECARE strongly believes in scientific research as a lead to identify the best technical characteristics of a technology to improve clinical results. The “engine” of a device, for example, is only a part of the system that contributes to its performance. Let's suppose we have a generator capable of transferring a lot of energy in a short time. If we don't pay enough attention to the equipment used to transfer that energy to the tissues - such as electrodes, transducers, cables, handpieces - we actually risk to waste the available power! It would be like having a lot of horsepower in a car with poor transmission, tires and brakes. Finding the right balance between physical variables of both the generator and the electrodes is one of the performance key factors of T~Plus. For example, the special resistive lotion-free electrodes - easily identifiable by their metallic red color - are one of the innovation achievements of our R&D department.

Conductivity, permittivity, temperature, depth of effects, skin overheating, circulatory response are some of the outcome parameters used to evaluate the performance of our electrodes.

By cross-analyzing data collected by different labs it was possible to determine that the conductive lotion becomes a limit as it rises the skin overheating curve in those treatment conditions where it is necessary to focus the energy on precise and deep points. Furthermore, when the electrode slips too much on the patient's skin, it limits the mechanical



impact of the therapist's hands during the treatment: especially needed in clinical conditions such as fibrosis, adhesions and contractures.

Thanks to an initial intuition of one of our specialists, later supported by data analysis, it was decided to develop special electrodes which - thanks to the production method- can also be used without lotion while maintaining the characteristic of a resistive electrode and without skin discomfort. They allow to remain steady on a specific point, without wasting energy and time, perceiving the movement of the tissue during the application.

Today, those who choose WINTECARE have the possibility of combining their manual technique with the transfer of large amounts of energy in depth without overheating the skin and enhancing the mechanical effect. The sliding induced by the application of the conductive lotion to the patient's skin remains an operative modality to be chosen and no longer mandatory, thus being able to range from a pleasant and fast drainage to more complex and targeted myofascial applications.

Diathermic Fibrolysis

One of the most common questions we hear during our training courses would be "is the treatment effective in case of fibrosis or scar tissues?" The answer to the question is basically yes! But let's see how.

Anyone aware of the effects of temperature on body tissues certainly know that a change of a few centigrade degrees on a sufficient amount of tissue triggers circulatory responses associated with a change in the viscoelasticity of the affected tissues. Weak molecular bonds become easier to dissolve and the perception of mechanoreceptors is reduced.

On the other hand, specialists used to treat scars and adhesions know that mechanical friction plays an equally important role. Sometimes even manual application is not enough. For this reason, fibrolysis has taken hold over time.

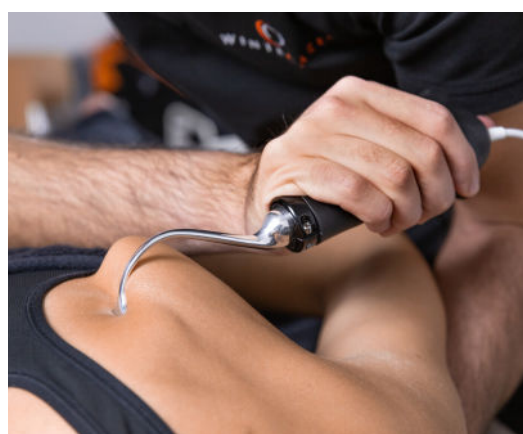
This technique provides for the application of special metal tips to the patient's skin in correspondence of fibrosis and adhesions with the aim of "detaching" those tissues which are not supposed to be adherent from a functional point of view. A typical example is the adherence of scar tissue resulting from a cesarean section with deep abdominal fascial tissues.

These conditions of adherence can generate imbalances and pain up to a negative impact on posture.

How does all this relate to the concept of diathermic fibrolysis? By combining targeted and fast thermal increases with the typical friction of fibrolysis techniques. The results on adhesions and fibrosis are accessible in less time and with less discomfort for the patient. The thermal increase generated by the T~Plus fibrolyser changes the viscoelasticity of the surrounding tissues while the friction between the tool and the skin guarantees the mechanical action needed.

The corresponding thermal increase makes the application easily tolerable by the patient, even for the ones who normally do not like fibrolysis treatments.

The new WINTECARE diathermic fibrolysers are the perfect tools for those who want to stay one step ahead in the most complex treatments. Designed and developed for expert operators who already master the dynamic mode.



The perfect balance between physiotherapy and technology: the Alma Mater Clinic approach

Meet David Vilar

Tell us something about you and your background.

I'm David Vilar, I've been practicing sports and competing all my life. Several years ago I got injured and unfortunately I didn't find the care I expected and needed. I was already interested in health, but since that moment I have been passionate about it. This is the reason why I decided to acquire new knowledge and how to apply it in a useful and sustainable way.

As an entrepreneur I decided to realize the project of creating a center where I could apply this work philosophy. My passion for sport and health created the need to launch the Alma Mater project, which I developed with all the enthusiasm I had and of course with the support of my family and all the people who are part of the team.

Life is made up of little coincidences and, while I was working on my project, I had the great fortune to meet Marcos Babier, a professional physiotherapist and trainer. We decided to embark on this project, in addition to supporting Marcos' personal branding on Instagram and Youtube.

From that moment on, the whole process has been an adventure, with the clear objective of being honest and creating a clinic with high added value for all the people who trust us, doing everything possible to help our partners.



Tell us about ALMA MATER CLINIC (services, structure, objectives, staff, etc).

Alma Mater's mission is to improve people's health. The balance between body, mind and soul is very important to us.

The main services we rely on to achieve these goals are physiotherapy, clinical psychology, neurophysiology and nutrition.

All our staff is made of health professionals. We are always open to new possibilities, therapies and treatments methods, in order to offer to our patients or sportsmen and women, whether amateur or elite, a personalized service. However, we are always cautious and we choose new approaches based on evidence.



One of our main objectives is that the whole team works in an interdisciplinary way, constantly enriching ourselves and being able to provide better and more efficient responses to the problems of our patients and athletes.

To improve the performance of athletes or the health of patients, our clinical psychologist Blanca Sacasa, the sports nutritionist Eva Arguedas or the neurophysiologist and psychiatrist Dr. Julio González work closely with all the physiotherapists of the team (Marcos Babier, Lidia Deza, Andrea Gayán, Olga Ramadán).

How did you find out about WINTECARE and why did you choose it?

Shortly after opening the clinic, together with the team of physiotherapists, I decided to increase the added value of our clinic. Many technologies were evaluated, and once we had seen, from a health point of view, what was best suited to our needs, we decided to go for WINTECARE technology.

A friend introduced us to the WINTECARE Spain representative, Sergio Garín. It was very easy to work with Sergio from the very first moment, we valued his knowledge and the technical arguments were any time more clear and interesting. Besides the fact that the brand was technically superior compared to the competitors, what really made us choose WINTECARE was the work philosophy: their approach gives priority to physiotherapy and the physiotherapist above all else.



How do WINTECARE technologies and programmes impact the way you work?

The combination of conventional physiotherapy and technology is something that has become part of the way we work and has been showing its strength for years.



With Wintecare, we quickly realized that this was not a technological tool that you could use on one or two patients a day. We understood that the T~Plus, which was our first acquisition, could be incorporated into the physiotherapeutic approach in almost any case that came through our hands. The comfort, the effectiveness, the power that this tool provided us to carry out our therapeutic objectives became evident. We did not need to modify our way of working to adapt to the machine, it was very easy to adapt the machine to us.

NEW ENTRIES

Tell us about a case you have treated and its results.

There have been many cases since we have been working with Wintecare. But I will tell you about one of the most recent and most beautiful cases we have had lately. The case of Lawrence Cheronon in Valencia. Lawrence is a professional long distance athlete currently specialising in marathons. The Wintecare team contacted us to cover a service for an athlete who was going to participate in the Valencia marathon. Marcos Babier was selected to lend a hand to Lawrence, who at the time was experiencing severe pain in his left hamstring, as well as a problem in the lateral area of his right leg. The concern was evident with three days to go before the competition.

Marcos began to work, focusing on a joint approach of general muscle recovery with an analytical approach to the areas of pain with the T~Plus. On the first day, he already improved. On the second day of treatment, he improved even more. On the third day he was almost 100% back to his normal physical condition; so much that the same Sunday he competed and became the champion of the Valencia Marathon 2021.

What do your patients think about the device? What feedback have you received?

As I said before, Wintecare's philosophy, where the physiotherapist takes priority, made us see that it is applied to more than 90% of our patients, that is to say, we use it every day. They all leave delighted with the sensations they have received, they feel much better than when they came in and above all, the therapeutic process has been much more pleasant than working without using this technology and this particular device.

Obviously, the feedback from a person who simply wants to improve their health a little is not the same as the more serious and more difficult cases, which on the other hand are the ones from which we learn the most.

The feeling that patients have when receiving passive therapy treatments with T~Plus is very

pleasant. The feedback is good, people usually leave quite relaxed, with much less sensitivity in the areas of pain, which make them ready for the active part of the physiotherapeutic treatment.

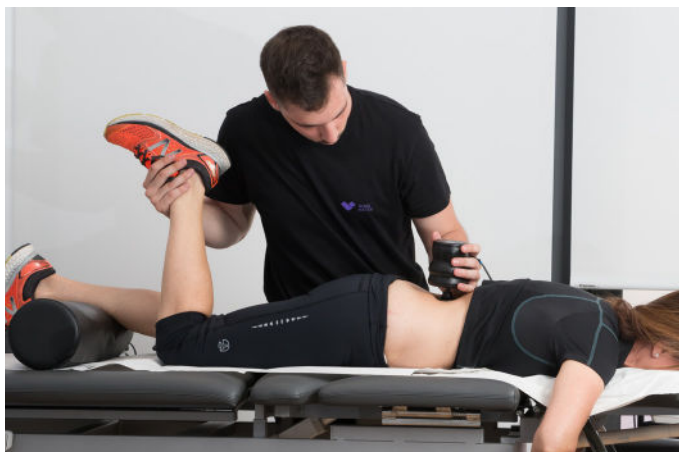
What added value did you experience with the introduction of V~Plus in your center?

The introduction of the V~Plus has provided the opportunity to have a tool that facilitates non-invasive neuromodulation, pain modulation, proprioception and motor control, specific strength in treatment areas through focal vibration.

Surrounding and equipping yourself with tools that can make your approaches as a physiotherapist much more effective and precise is essential.

We have a lot of work ahead of us to squeeze all the possibilities of application, both intensity and frequency in our patients who are likely to use it.

We are really excited to be able to bring out its full potential in broad sporting disciplines and especially pre-competition treatments that improve the athlete's sporting performance, be it a marathon runner or another kind of athlete.



Now that you have the opportunity to combine the effects of V~Plus with T~Plus, what changes have you seen in the results of your treatments?

In cases where we combine the two tools, you are immediately aware of the potential of bringing them together for similar therapeutic purposes. The versatility that comes from the fact that neither of these technologies is exclusive, allows you not only to incorporate the focal vibration of the V~Plus after having worked with the T~Plus, but you can also use it with manual therapy, therapeutic exercise, kinesiotaping, fibrolysis electrodes and a long list of other tools.

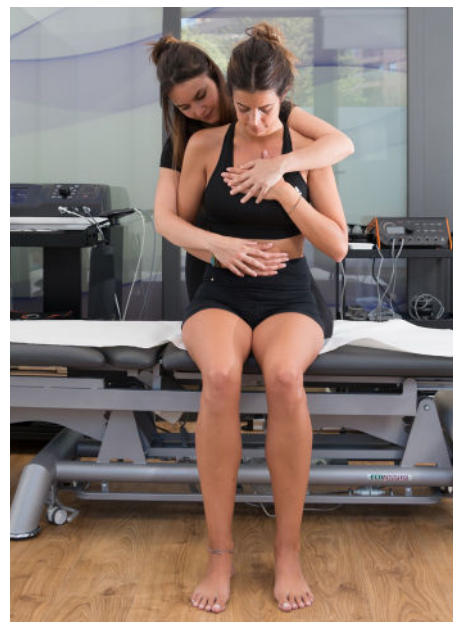
With regard to the results in cases incorporating both technologies, it must be taken into account that, with the exception of pain modulation, the mechanisms of action and therefore the objectives of application are different. This means that in cases where you incorporate both, it is because the patient really needs it and, therefore, you are more precise and the final results are always much better.

What future goals do you set for your center?

The main goal is to become more consistent with the aim of maintaining the highest possible levels of quality, throughout the year and whoever we are treating. On the other hand, to try to communicate in a more efficient way what we do, not with the aim of being seen, but with the aim of contributing to the world of sport and physiotherapy and health all that we can offer.

Other ideas are to continue to promote health through sport and knowledge, especially with the new generations, feeding their curiosity to know more and improve.

Furthermore, we are interested in strengthening the relationship with Wintecare, trying to offer them the best possible specialists, providing all the knowledge possible to consolidate and move up a level.



And finally, this has been the first clinic we have tackled, an incredible experience from the birth of the idea, through the opening in the middle of the pandemic, to the present day. All the difficulties have been an opportunity to create and improve the project of which we are very proud. So far, we have the need and the desire to create a second clinic that complements the first, making us more competitive. Always with the premise that we are people who take care of people.

Second degree muscle injury in the hamstring muscles of a football player with Sebastiano Erbi

Let's talk about a case report by Sebastiano Erbi, a WINTECARE specialist who lives and works in Denmark in the professional sports environment. The case treated today relates to a second degree muscle injury to the hamstring of a football player. We will see together the steps taken within the treatment program and the results obtained.



We have made a data collection of the clinical case related to a Copenhagen football player who during a hurried race, when braking the player falls to the ground. From that moment it was clear that the injury was serious.

This second degree injury came out the day after the match, when the player underwent diagnostic tests with the club. The exams reported a second degree injury at the level of the insertion of the hamstring tendon.

In the first photo it can be seen that the region is quite extensive and vast, the white shows us that it is an internal hematic effusion; while the scattered white spots are old scars from previous trauma, as this player has not been lucky in his life and has had several and different injuries in the same muscle groups.



After the diagnostic exams, an initial evaluation was made for drawing up a treatment program. In the evaluation, we found that there was no total breakdown of the muscle fibers and the edema on the surface was not visible enough. Therefore, we began to evaluate how the athlete's condition was: when we started we were still in the acute phase (less than 2 weeks after the injury) and we started immediately (June 25th, the athlete was injured on June 21st) with our program. At first, manipulation was impossible. To this we added a psychological assessment (how he felt after this trauma) and we assessed the pain condition both at rest and in motion. In this first phase, in resting position the football player felt 6 out of 10 in a pain scale from 1 to 10. With the movement the pain increased to 7-8.

The first treatment begins on June 25th, we only worked in the affected region in a light way so as not to overstimulate an excess of inflammation. The electrode used was a resistive one at 95 W in the gluteus area to stimulate blood perfusion for about 4 minutes, the purpose was to stimulate the tissues to give endogenous responses. Then, again with the resistive electrode, we got to work in the region of the hamstring insertion, working about 20 minutes at a very low wattage (4W) and concluding the session with a drainage of about 15 minutes at 3VA. We then increased blood perfusion at the gluteus level to stimulate the body from the circulatory point of view, which would then help us to drain the edematous component that we find on the point of the lesion. On this point, however, we have made some drainage that has allowed us to accelerate this reabsorption.

Here you find a summary table of what we have just seen:



RES	Watt	Seconds	Joules	Con Mobilizz.
1 Blood perfusion (gluteo)	95	240	22800	No
2 Proliferation / Repair	4	1200	4800	No
CAP	VA	Seconds		
3 Drainage	3	900	2700	No
4 Vasodilation	—	—	—	Si/No
5 Temperature increase	—	—	—	Si/No
TOT TIME "		2340		

With the following treatments, we begin to increase the energy transferred to the tissues from time to time, especially as the patient's responses were positive. Later I noticed a fairly evident tension of the insertion of the hamstring. I saw a thickening, this made me exclude a blood effusion, but I could notice a rigidity and a pain due to the strong contracture. During the first treatment I also did a neuromuscular taping with draining action to continue helping the draining activity that had already been previously stimulated with the hypothermic capacitive electrode of T-Plus. In the following days I

did the same work, in the first week the treatments were repetitive because I only needed proliferation and drainage as physiological reactions . On one hand, the proliferation was intended to accelerate the tissue repair process and, on the other one, the drainage was useful to reabsorb edema and inflammatory catabolites. At the fourth session, the treatment was always carried out in the same way, what changed was the pre and post treatment condition. In the post-treatment there was no evidence of the contracted myotendinous junction and there was also a little blood effusion. The footballer was happy with the stain because he thought it was a response due to the work he was doing, but asking what his habits were, he reported that the club had started functional re-education with specialists and some machinery. After the drainage and proliferation session with T-Plus, that stain had reabsorbed and almost disappeared.

After a week of treatment sessions, a checkpoint on the athlete's condition and feelings was made. During the period from the fourth to the seventh day he followed a rehabilitation program provided by the medical staff of the club which included exercises in isometry with light load and massage sessions on the injured area.

The problem faced was that no one made the athlete do these exercises passively, accompanying him in his movements, he did them independently on machines such as leg extension with weights.

The active exercises with weights were counterproductive to the work that was being done with our treatment program because the muscle fibers, not yet completely realigned and healed, were subjected to an effort that increased the breaks, impacting on the healing times. I therefore found myself managing not only the original problem, but also some rebound effect due to the fact that the athlete was not resting. This situation brought us back in our program and one week after the injury, we were still in an acute phase and for this reason an evaluation of the joint range was not carried out. After a week, however, his psychological condition was stable and the sensation of pain had decreased both at rest and in movement.





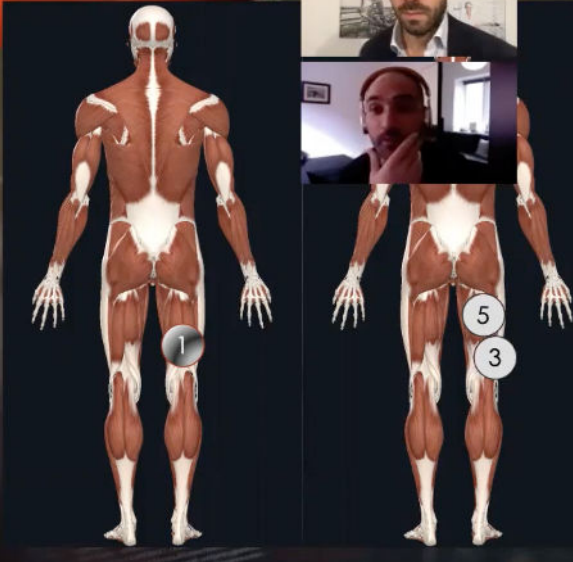
After being sent away for 2 weeks, the athlete showed up again in the studio. He reported that during the period in Uruguay he continued to undergo physiotherapy treatments with tecar, electrical acupuncture and functional rehabilitation. During deep palpation in the affected region, he felt a discomfort, but no longer a pain. In this phase, we were no longer in acute inflammation, which was actually completely absent, even the ROM was quite free and had no functional limitations.

Psychologically he felt even better, the pain in resting position had completely disappeared, while the pain under exertion was minimal. We therefore entered phase 2, in which the work was similar to that of phase 1, what changed was the energy transferred to the tissues and a marked thermal increase. In fact, if in the first phase we only did an initial blood perfusion and drainage work, we replaced the proliferation work with the temperature

increase, because there was no more inflammation. The increase in temperature was useful in facilitating joint mobility during mobilizations in subsequent treatments.

Here you find a summary table of what we have just seen:

Actual treatment PROGRAM



20 Luglio 2020 ore 19:00 fase II WINTECARE® 12

TRATTAMENTO 1

RES	Watt	Seconds	Joules	Con Mobilizz.
1 Blood perfusion	45	720	32400	Si
2 Proliferation / Repair				
CAP				
	VA	Seconds		
3 Drainage	5	900	4500	No
4 Vasodilation				
5 Temperature increase	190	480	91200	Si
TOT TIME "1"		2100		



An evaluation was then made at week fourth: the athlete felt a specific discomfort in the area of the injury. In addition, a significant amount of scar tissue was felt during palpation. In fact, the

painful perception in movement had arisen precisely from the adhesions. The athlete showed considerable strength against resistance and felt a greater elasticity of the muscle. The inflammation was completely absent, there were no functional limitations as the ROM was 100%. The athlete perceived even greater positivity in terms of psychophysical well-being, the pain in resting position had disappeared and the pain in movement was very light.

From this moment on, a new phase in the treatments began: we started to treat the non-injured limb to stimulate the reparative processes of the whole body. This is because the athlete had started training again and was almost to the point to join the group again. From this moment on, we had started to keep the other limb under control, trying to balance muscle synergies in order not to incur the hassle of overload training, trying to manage any compensation.

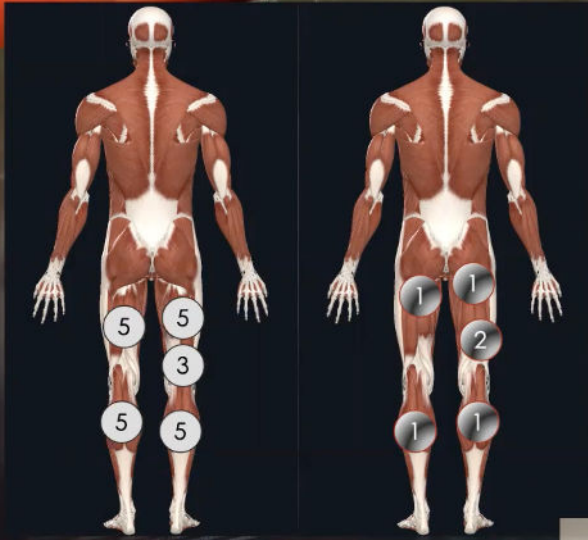
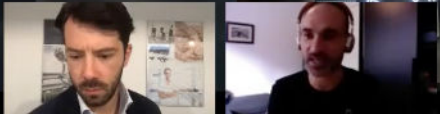
Working with the temperature we saw that the conditions improved, but these scar adhesions were quite persistent. Therefore we worked a lot manually and with the electrode to release them, transferring 180VA for about twenty minutes. In these sessions the capacitive on the limb with the lesion and resistive on the healthy limb were used, with two objectives: increase in temperature, dissolution of these scar adhesions and drainage, which decreased in terms of minutes because the bandages were introduced. The other limb was treated both to balance the condition and because the athlete also felt pain on it.

Actual treatment PROGRAM

29 Luglio 2020 ore 16:00 fase III WINTECARE® 17

TRATTAMENTO 1

RES	Watt	Seconds	Joules	Con Mobiliz.
1 Blood perfusion	110	600+360=960	66000+39600=105600	Si
2 Proliferation / Repair	20	300	6000	
CAP				
3 Drainage	5	600	3000	Si
4 Vasodilation				
5 Temperature increase	180	300+240=540	54000+43200=97200	Si
TOT TIME "		2400		

In the following days a work of thermal increase in capacitive mode and vasodilation in the peripheral areas was always done. Finally we passed to the drainage phase, decreasing more and more the quantities of time and energy.

What was the athlete's condition at the end of the period?

About 2 months after the injury, the athlete underwent the diagnostic examination. It can be seen that the wide area where there was the lesion, the effusion and the scar tissue has shrunk and from the color we understand that the fibers had become much more homogeneous. It no longer presented any specific discomfort and during palpation the cicatricial adhesion of fibrotic tissue was no longer felt. The athlete has completely regained strength and feels greater elasticity and reactivity of the muscle, the evaluation of the joint range is 100%, the athlete is therefore healed and returned to training with the group.

From this case we deduce that when you work with a professional athlete it is inevitable that unscheduled events can occur, for example the therapist gets the idea of a treatment program with the aim of recovering it in 2 weeks. Then the athlete has other needs that extend recovery times that must be managed in order to get him back to training at 100% in the shortest possible time. Another interesting point is the stratification of the treatment; that is, there is a phase 1 in which the instrument is mainly used for drainage and tissue regeneration; a phase 2 in which we are careful to manage any compensations and scar tissue and then a phase 3 where we work on biomechanics to make it arrive in the field without having the problem in mind anymore.



Hollywood's backstage: working with the hall of fame of stuntmen

The experience of René Felton Besozzi

Ciao René, tell us briefly about your work in Hollywood.

I work independently throughout the Hollywood Stunt Community helping injured Stunt Men and Women resolve various Performance Injuries.



What makes these cases interesting from a clinical point of view?

A stunt performer has a thrilling and challenging job; however, it is also a risky career with many injuries and, in the worst cases, even deaths. Many film, stage, and television productions would not have nearly the level of spectacle and “wow factor” without the performances of stuntmen and stuntwomen. From car chases to choreographed fight scenes, many of these entertaining and complex filmmaking feats are made possible due to the skills of professional stunt performers. Unfortunately, stuntmen can become seriously injured due to defective or malfunctioning specialized stunt equipment. Their cases are interesting because of the nature in which they get hurt. Some of the common dangers of being a stuntman include cuts, burns, broken and sprained bones or joints and abrasions. More severe injuries can include gunshot wounds, severe lacerations, compound fractures and concussions. While stunts are usually natural risk-takers and enjoy an adrenaline rush, they also must know their skills and limits. Successful stunts specialize in areas like fighting (which may include martial arts or boxing), driving and riding, falling and others. They perform action acrobatics, but this can lead them to serious injuries.

What parts of the body are mainly affected from a treatment point of view?

Each stuntman classification has injuries according to his skills:

- DRIVERS: Have severe neck issues ranging from compressed vertebra to hernias.
- MARTIAL ARTS: Kickers have a wide range of leg injuries, everything from hamstring and abductor/adductors strains. Severely damaged, torn, exploded quad muscles ligaments, tendons. Shoulder trauma, broken bones/clavicle.

My patient Eric has them all - I have been working with Eric since 27th August 2018 for scar tissue, lack of range of motion in hips due to scar tissue on quads.

Tell us more about one of your clinical case:

NAME *Eric Van Arsdale*

AGE 38

WEIGHT 67 kg

HEIGHT 1.73



Brief anamnesis of the patient

Eric worked 20 years as a professional Stunt Man. He specializes in Martial Arts. The clinical condition/injuries of my patient Eric are some of the most unstandardized classification of injuries obtained I have ever seen. He suffered from many traumatic Injuries: broken achilles 2012, 2019 ACL right knee, broken clavical 2020, car accident 2002, torn shoulder muscles, hip injury, major double quad injury that resulted in him having to take time off from dynamic activity.

Clinical condition of the patient

Currently in good physical standing after 3 years of constant treatment.

Treatment objectives

My goal was breaking down all the massive scar tissue buildup from various injuries.

Number of treatment sessions and period

Since August 2018 I have taken care of him.

Brief description of the treatment

Before I begin each person is asked to drink a glass of water before treatment. A well hydrated body is richer in electrolytes, and therefore more sensitive to treatment.

First phase

5 minutes resistive mode to warm up the area I'm working on. In this phase I try to call for ROM easily. Depending on the situation I can decide to use the diathermic fibrolysis to work on fibrotic or scar tissues in a no painful way for the patient.

After this warm up phase I go back to resistive mode again to activate and release the area worked on, gaining everytime a bit more in ROM.

Second phase

I usually switch to capacitive mode and use around 14 VA depending on the situation. If he's not in an acute phase I usually ask him to combine some exercises with the treatment. Sometimes I use elastic bands to perform exercises. After the treatment with the T~Plus device I ask my patient to do some water workout with me to enhance the electromagnetic stimuli received by the technology, thus increasing the positive biological activation.

Other treatments made with Eric

Brief description of the treatment For Quad explosion:

- Active Motion and resistive mode 36% power
- Diathermic Fibrolysis - 5/6 W
- Capacitive mode to drain 42% power

KNEE- WINTECARE TREATMENT After PRP treatment

- 2 times per day WINTECARE protocol mobilization/anti inflammatory process
- PROTOCOL SETTINGS - Resistive mode 15 - 36% power
- Capacitive mode 15 - 42 % power
- 15 - 20 minutes each

Depending on the phase of the treatment.

Possible exercises combined with the treatment

After morning treatment I would take him to the pool.

- POOL WORKOUT: specific water workouts called "René's Water Workout"-
33 exercises done in one specific sequential order to rebalance entire body after trauma.

After pool workout we go to the gym for a

- WEIGHT TRAINING: to reinforce injured muscles.

End result after treatments and follow up AFTER KNEE RECOVERY - He was able to return to work within 3 weeks instead of 6 months.

What have you learned from the cases?

The valid reparative capabilities of this technology. This technology is the best at the worst case scenario with regards to soft tissue, ligament, tendon, bone damage.

ERIC VAN ARSDALE AND HIS POINT OF VIEW ABOUT THE TREATMENT

So Eric, first of all, nice to meet you. Could you tell us something about you and your work, that as far as we understand it is related to the reason why you had some treatment with T-Plus.

Sure. My name is Eric van Arsdale. I've been a professional stuntman in Los Angeles, California, for over 12 years now. I've worked on over a hundred feature projects from featured theatrical and prime time television. So as a stunt performer coordinator and second unit director, we do all the action oriented elements of feature length projects and stuff. So, we do basically everything: from driving cars, sequences to falls and wrecks to tactical work, armed combat to aerial work. We do everything that is above and beyond the average physical capabilities of a "normal" person. So we're across between professional athletes and actors.

Being a stuntman exposes you to a tremendous amount of injuries. Could you tell us something more about it?

Yeah. That's the interesting thing about our industry: a lot of people think we're devils, but in reality, we're actually trying to mitigate as much risk as possible as a stunt performer. You know, there are a lot of extreme athletes out there that are doing some amazing things in their relative fields, but they they're willing to take a certain amount of risk; same thing as professional performers, we're willing to take certain amount of risks, but we also go through every possible scenario that we can possibly think of to keep the performance safe. Because ultimately what we're trying to do is create entertainment. You know, we're not trying to break records, we're not trying to go beyond the limits of our capability and our technology and also our imagination. So we do get bumped by our bumps and bruises and our injuries and stuff. And, of course, the ideal performer is someone who can get back and do it again, not someone who ends up basically damaged or severely injured where they're going to be out and out of work.

I'm 38. So I was just an elite level athlete. I wasn't top pro level, I was very advanced and did play through advanced placements like teams and stuff like Olympic development type programs and then D two and D three level at college. I was athletic: soccer was my main sport, then I played lacrosse and swimming basically. And then, like every athlete, there is definitely a degree that they can achieve based on their physical structure, on their height, on their muscles and muscle density, at least this is what I believe. And when you look at most athletes in every professional field, they're all roughly a very specific kind of height and weight because they're trying to be the most optimal performer in that relative discipline.

Usually, we're looking for the best of each discipline. This happens also in the entertainment field where you look at a lot of doubles. We're trying to match the physical capabilities to actors and the actors come in all sizes as well. But when it comes to injury, in the sports environment, lots of athletes are followed by a coach, a sports medicine doctor usually on the field with them or practices in their facilities. So you can almost track exactly what the injury was and treat it instantly; and that's what you want on that highest performance level. We don't have that degree of care when we're on set, if we tweak something, what we do ends up being compounded.

Sometimes you just offer a day, but to perform this task, you might be asked to do it anywhere from one take or 20 takes, you know, so if you get hurt on the first take, you're starting to compound over and over and over without getting any treatment. Our body are so resilient, and for that we usually go into a "preservation mode" and it will just kind of shut off that area. And then we'll compensate, but we don't want to be running day-to-day on compensation mode.

We never really find proper healing. I feel like the older generation has gotten to that point where they've almost exhausted every possibility through conventional therapy, medicine, surgery, all that at least in the US.

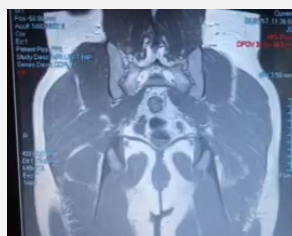
We think that this is absolutely right, especially in the environment that you have described where time is all and you need this care. Sometimes you would need to take care of your injury in the right way at the moment where you get it, so you're able not to transform it into a bigger problem later on..

Yeah. For example René's been working on one of my Achilles heel injury. That's almost a 11 year old injury. To see the efficacy of this technology working on something like that, it's blown away for me because I went through traditional therapy, conventional or unconventional therapy through physical therapy and a trainer. And especially in Hollywood and other parks, we get access to some of the top trainers in other disciplines, like working with a UCLA coach. Or, when I had my surgery, I was in Boston and I got the head orthopedic surgery at the Harvard school of medicine, so I had the privilege to have the access to some top quality doctors and practitioners. I feel like I have a good vantage point on the current stand in our medical system. My mother was head of registrar for two major hospital facilities where I grew up. So I've always known the degree of the medical system, but when I look back at a lot of my treatments with this technology, I see how I'm able to retract; because we kinda know when we start developing pain: it's an indicator, not necessarily an indication of that is the epicenter. Right? We know that something is putting strain on another system that we're compensating for this system and is saying, "no, no, we can't keep going like this". And we shut that down and then it just travels to another. **So what I think is that what the device does is amazing.**



And I've been able to understand this from the most immediate thing, affecting my movement, my health, my physicality. René, who's been working with me with the T~Plus, I can see like taking off three years from me. For someone who has as many compounding injuries, you need that recovery. You need that to kind of reassessment over and over and over.

It seems like you are describing your case and effect, not just locally on the tissue, but something that was kind of connected to the neurological capabilities for you to control that portion of your body...



Yeah, absolutely. I think it stems and it's all kind of connected. With the WINTECARE technology it's possible to reactivate dormant areas. It completely changes our mindset; so, now we've been introducing it to more older established people that have been doing it since the seventies. And once again, they've lost hope because they've gone through "everything", so they don't believe in anything anymore.

I've tried all the other therapies and I've tried between dry needling, acupuncture through polarity. A lot of that is externally, even rousing and effective, but it's very archaic. It's very traumatic as well.

Wintecare T~Plus is not traumatic and more sustainable, I think. So to show that generation, there's still hope to give you 10% degree of relief, I think this is a game changer. **This is what this technology can do. It gives the body a degree of relief from whatever stage or trauma or lock up that the body has been created over after years and years.** If it's just holding onto it, it's not getting the proper treatment. Or even for someone like me, from a stretching, flexibility, like your body in a sense will never go beyond a certain point after a certain age. I think I'm a great case from this point because I was an athletic person, but I never knew anything about proper nutrition, stretching, prevention, recovery, that kind of stuff.

So I've found that I have taken off almost three years of doing the traditional heavy lifting and body workouts and a lot of the higher

compression exercises I've been able to actually just keep breaking away as much scar tissue that I've built up from literally shoulder down to my ankles. I've increased my mobility easily by 10% beyond what I was doing before my injuries, I would say just because I wasn't prepared for that, if that makes sense. So people that are in their older stages of their lives, you can actually almost get them in this type of technology and help them actually, in a sense they're back when they were in their early twenties.

Yeah. It makes sense, especially for the performance environment. Definitely. You said the word "injury" many times. Could you describe a little bit more in detail what happened and somehow how this brought you to René and the sessions specifically you had with her and all the improvements.

Honestly got to the point where everything just felt heavy for me. Like if your body isn't moving right, the way you feel like it should be, there's a chronic pain. And at the early thirties I shouldn't be in certain chronic pain. Yes. I've been asking my body to do things that are not normal for the average person. I asked it to perform certain types of body mechanics and movements that aren't necessarily natural, especially when you're in our environment.

So everything came down to, I thought my Achilles' heel injury, I completely had a rupture, had surgery in that back in 2009. And then that is, then we even go further back to, I had abdominal. I had a lap seatbelt in an old, like a Oldsmobile and we were in high school. So you're talking about late nineties. So another 10/12 years before that was car accident. And then, the lap seatbelt basically gave me internal bleeding in my abdominal wall. So I was in the ICU for a week and never took care of that. No one ever talks about trying to clear out all that scar tissue and that kind of stuff.

I still kept going to play through college and still I just hit a wall. I ended up hitting a wall as an elite level athlete. So getting into stunts, I did other elements of it that asked my buddy to do other things from aerial stuff, from gymnastics to park court, to tricking martial arts, all that kind of stuff. I was just literally hitting the ground, hitting hard surfaces and stuff and I learnt my pain threshold was pretty high.

I had pain that radiated up into my hip. And then I actually ended up blowing out both of my quads, like probably a high level quad strain, not full rupture, I don't think, but I couldn't walk for three days. I've never taken care of those, kept working. My ankle is kind of just stuck in this never getting full extension. I had a partial tear in my knee and that's when I came to Italy. René helped me explore that. Then I was back home, my doctors in the US told me three months, it's not a full tear, three months, just stay off of work and then start rehabbing it to strengthen it up.

When I could go to Italy I was helped with this treatment with the WINTECARE device, in 22 days I was back almost. I was back pretty much a hundred percent in 22 days instead of 3 months. From my point of view, that's what we can call a result. I really enjoyed trying to understand how this technology is and works. Non-invasive compared to a lot of other ones. The results are almost instantaneous on a degree of relief. It's easy get a good massage, but then it usually creeps back in within a couple of days.

Right. And how would you describe the treatment sessions with Renee briefly?

I think a lot of it has to do with a mental state as well. You have to be open to the treatment and especially here there is a lot of skepticism. I've noticed people that have been open to treatment, it's been way more effective versus people that are more hesitant towards it. The machine is just a tool, to have consistent results you have to have a good therapist operating that machine as well and I love that. The technology from what I gathered has been around for awhile, but this iteration of it, this version of it and how this company works with it, I think really stands out.

A new beginning in the heart of Europe: the partnership with Fizian

Slovenia is a growing country with a large concentration of therapists interested in enhancing their skills. It also represents a country of important union between Western and Eastern Europe and embraces a variety of cultures with different facets and characteristics.

Physical therapy and especially CRET technology are spreading in line with the southern European trend in the most common areas of application ranging from classic rehabilitation to post-surgery, aesthetic medicine and sports performance.

The need for quality training and the desire to have high efficient tools based on proven scientific evidence are the two main drivers that have favored the collaboration with our distributor for the Slovenian area.

We are happy to have set out on a common path with the distributor *Fizian*, a well structured company with a range of products dedicated to those who want to become a successful specialist in physical therapy.

Here's some pictures about our last training with them.





In the coming edition...



- A case with the V~PLUS: bruxism treated with focal vibration technology by Andrea Arias

- A look at one of the most important T&F events: Eugene 2022 World Championships

- Be The Ones: Ruben Tenorio and the world of professional football

... and much more!



Arrivederci!



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