

share_{for}care

A PATIENT'S STORY

A Spanish firefighter tells a powerful story about living with dialysis.

RECIPE

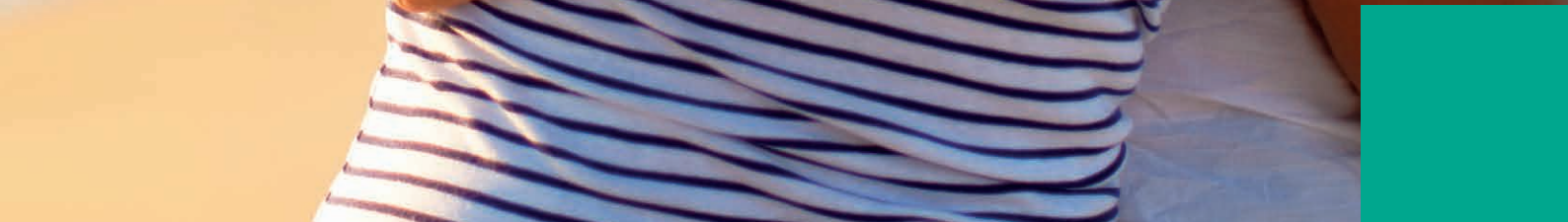
Food for thought:
Genuine mozzarella will help you kick off the greenest of seasons.

HEALTHY LIFESTYLE

Dialysis and physical fitness: Is it really a paradox?

TRAVEL STORY

ANTIBES – THE MAGIC
OF THE AZURE COAST



share for care

EDITION 1-2017

Dear readers,

You're holding the first issue of *share for care* in your hands – a magazine all about chronic kidney disease. A lot has probably changed for you since your diagnosis. The treatment is now playing a major role in your everyday life. Adjusting your diet and making the necessary changes in both your private and professional life are tremendous challenges.

In light of these new circumstances, we would like to provide you with support and comprehensive information on the treatment as well as about how to deal with the entity of chronic kidney disease itself. Presented in terms that are easy to understand, *share for care* will keep you up to date on the latest research developments, new treatment methods and many other topics that will be interesting and useful to you in day-to-day life. Are you planning your next vacation? The magazine will introduce you to holiday destinations with facilities designed to meet your needs and requirements. In this issue, we feature the stunning town of Antibes, located on the beautiful French Riviera. We will also tell you about Francisco Cañete Sánchez from Spain, a former firefighter and a man with some very special insights on living with renal failure. Selected recipes, daily keep-fit exercises and answers to important everyday questions will round off the magazine. For most patients, self-determination is the key to maintaining self-esteem and the most important prerequisite for a high quality of life, as well as for personal satisfaction.

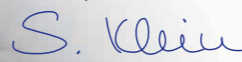
We want this magazine to be a valuable tool you can use to help you take an active role in your treatment. You'll find out how your treatment works, why you need it, and what kind of treatment options are available. In the future, *share for care* will appear twice a year.

For us, the most important thing is to emphasize the importance of your own role in the treatment as well as to show you all the new and exciting moments life holds ready for you in spite of chronic kidney disease. Certainly, your own contribution will be key as well.

We would be delighted to hear back from you should you have any questions, comments or ideas.

The editorial team of *share for care* hopes you will enjoy the first issue!

Yours,


Simone Klein


Christopher Boeffel

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Minimally invasive access techniques for dialysis:
Is it right for me?

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SPECIAL TOPIC

Your lifeline – The AV fistula:
Why do I need it, how is it created and what do I need to know about caring for it?

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Questions from patients

Dialysis access

also possible with a minimally invasive technique

Researchers at the Vascular Center in the University of Dresden have introduced an innovative method of creating an AV fistula. The experts introduce two special catheters via puncture points on the upper arm to connect with neighboring blood vessels (i.e. artery and vein), and they use electric current to create the connection needed.

In comparison with surgery, in which stitches are used to close the wounds and the vessels

have to be more severely injured, this procedure is much more gentle and offers hope that better and longer-lasting AV fistulas can be achieved in future. The procedure can be done on an outpatient basis with local anesthesia, and according to the scientists in Dresden it should be suitable for around 40% of the patients. At the moment, this innovative technique is still undergoing further testing.

Good results with potassium reducers

Potassium is essential for life, but too much of it can be extremely dangerous.

The mineral is found mainly in fresh fruit and vegetables, and it plays an important part in supplying the body's cells. In dialysis patients, too much potassium often collects in the blood because not enough of it is released via the kidneys. Hyperkalemia (excess potassium) is a potentially life-threatening electrolyte disturbance, as it can lead to muscle weakness and cardiac arrest. When the potassium level can't be effectively lowered in spite of dialysis and dietary adjustment, an effective drug treatment is now available. Several studies in patients with hyperkalemia who were suffering from chronic kidney disease have shown that a drug

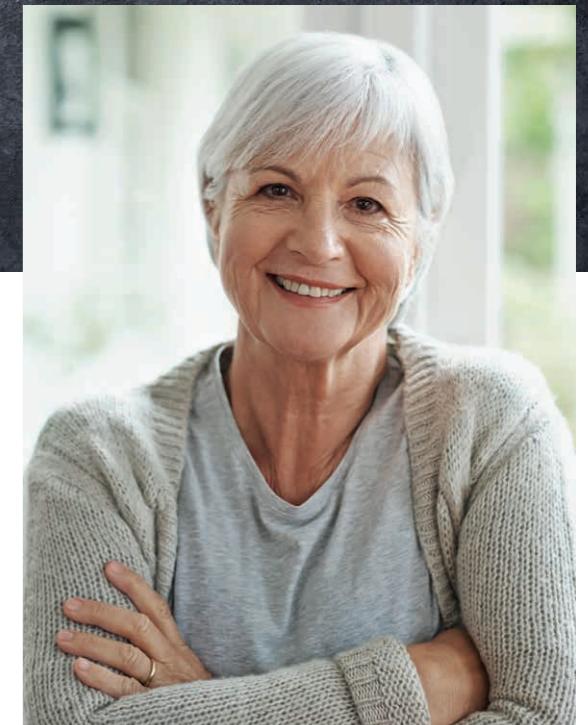
called "patiomer" can reduce the potassium level rapidly and persistently and that it is well tolerated by patients. Patiomer has already been approved for use in the USA, and worldwide approval is expected. Other drugs are also being tested as well.



NEWS



Cocoa and green tea



Flavonols are specific components of plants, and particularly large amounts of them are found in dark chocolate and green tea. They protect the blood vessels and have beneficial effects on blood pressure. Scientists at the universities of Essen and Düsseldorf have now discovered that these substances also help dialysis patients. A high daily intake of flavonols improves the functioning of the blood vessels in dialysis patients in both the short term and longer term. The study also showed that vessel damage already caused by dialysis can even partly be reversed with flavonols.



THINGS WORTH KNOWING ABOUT THE VASCULAR ACCESS SYSTEM

During hemodialysis, up to 600 mL of blood per minute leaves the body so that toxic substances can be removed by a dialyzer before it returns again. This is only possible with a permanently reusable point of access to the circulation – best achieved using a very special kind of blood vessel called an arteriovenous shunt (AV fistula). This is a surgically created connection between an artery and a vein, which gives rise to something not really intended by nature – a very large vein that has the similar pressure and blood flow characteristics as an artery.

After the surgery, which is usually done on the lower arm, the vein expands due to the increased blood flow and the

vessel wall becomes thicker, so that it is easier to puncture. This process of “maturing” the AV fistula takes around six weeks, and it is only after this that dialysis becomes possible via the AV fistula access. So an AV fistula develops slowly – but depending on the quality of the blood vessels, it may then function well for decades. As a patient, you can also actively help with maturing the AV fistula by doing small strength exercises for the hand using a ball or rubber ring – called “AV fistula training.” These exercises, with instructions from your doctor, usually already start quite a time before the AV fistula surgery.

If there are no problems during the outpatient or inpatient surgery (usually done with local anesthesia), patients can return home after a short interval. The stitches are usually taken out again after ten days. This will be when you start to become your own personal AV fistula expert – along with ensuring regular wound care, dressing changes and doing AV fistula training. Over the years, many patients develop a very good feeling for

their “lifeline.” When you touch the vascular access point, there should always be a slight vibration, which many patients say feels like a “whirr.” This pulsation should now be checked several times a day (minimum in the morning and evening), and it can also be monitored using a stethoscope. It is a sign that your vascular access point has a healthy blood supply. Important: as the AV fistula is not a natural physical state, it is possible for complications to develop. These need to be recognized as quickly as possible. If the “whirr” stops, you



are best to tell the doctor treating you about it straight away, since acute AV fistula blockages can be opened up again in many cases.

The AV fistula as a lifeline

Precautions after the surgery



- Always wash your hands thoroughly
- Monitor the AV fistula function
- Avoid putting heavy loads on the AV fistula arm
- Rest the AV fistula arm in a raised position to avoid edema (excess fluid that collects and causes swelling)
- Don't do any prolonged overhead work
- Avoid any risk of contamination or injury
- Don't wear any tight clothing or tight bandages on the AV fistula arm
- Don't measure your blood pressure on the AV fistula arm

If the surgical wound has healed well, you should wash and shower daily in the normal way. Moisturizing creams are also allowed. The AV fistula will now feel like a small rubber tube underneath the skin. Your dialysis team will be happy to give you tips about all the precautions.

DIALYSIS

Once your AV fistula has matured, it can be used for dialysis for the first time. To do this, it is punctured with a special fistula needle. As there can be contact with nerves during this procedure, it can be uncomfortable and may hurt. Applying a cold spray or an analgesic cream in time before the appointment can help.

PUNCTURE TECHNIQUES

Various puncture techniques can be used for hemodialysis. With the buttonhole puncture technique, the same needle tract is used again and again. One of the advantages of this method is that the nerves quickly become dulled,

but it is linked to a slightly higher risk of complications and infections. The area puncture technique uses two short sections of the overall length of the AV fistula, and here again complications such as aneurysms (swollen arteries) and stenoses (blockages) can develop. Another option is the rope ladder puncture technique. With this method, the puncture site is moved a few millimeters further on at each treatment appointment, so that the rest of the AV fistula is spared. This means that the whole length of the AV fistula is used. Patients are also basically able to help during the puncture procedure, or can even do it themselves following training.

After dialysis, similar precautions apply as after the AV fistula surgery. The dressing should be left on the arm for around 12–24 hours after the puncture. Make sure the puncture wound has healed properly before you wash the arm or apply cream. Protect it from

sunshine, dirt, tight clothing and weight-bearing. If you notice any skin lesions, pain, or reddening, always consult your doctor. In general: anything that might block the blood flow should be avoided as much as possible.

ALTERNATIVES TO THE AV FISTULA

The AV fistula is the preferred option for dialysis. In patients with vessels that are thin or previously impaired, an artificial blood vessel (made from synthetic material) can also be placed. Once the wound has healed, the prosthesis AV fistula (graft) can be punctured in the same way as a natural AV fistula. If an AV fistula or graft is not possible, a treatment via a central venous catheter is possible.



Accepting *life's* challenges

Francisco Cañete Sánchez: diver, firefighter, dialysis patient

Francisco Cañete Sánchez was born in Málaga, Spain, on 23 July 1940. He received his intermediate high school certificate when he was 14 and completed an apprenticeship in commercial graphics. After working for a few years, he joined the Royal Fire Service in Málaga in 1975, and by the end of his career there he had risen to become a fire captain and district chief for the eastern part of the city. In 1984, he became Training Director for the GRES special rescue group. He retired in 1997.

Francisco Cañete Sánchez has been receiving dialysis treatment at the B.Braun renal care center in Málaga since September 2015.



Señor Sánchez, what's your favorite hobby?

That would be sports of course. I've been enthusiastic about sports all my life, and still am today. I was already taking part in cycle races when I was 14, and I never stopped. Even today I'm still doing cycle training on rollers. In 1962 came scuba diving as well, and later I passed an exam to become a national diving teacher.



I'm proud to say that I'm one of the longest-serving diving teachers in Spain – my license is number 46. In 1972, I started taking part in underwater navigation as a sport and I was Andalusian champion in it five times and Spanish champion three times. I got second

place in the European Cup. I took part in both the European and world championships as a member of the national team. I don't mean to brag about these successes, I just want to show that I've always been a very active and dynamic person. I've always been driven by a desire to improve.

What led you to your job with the fire service?

I organized a diving course for members of Málaga's Royal Fire Service in 1975. After that, they offered me a permanent job and I became the head of the diving group that I trained. I found that sharing experience with the participants was inspiring. I saw that being a firefighter means not running away from danger like everybody else to save yourself, but going directly towards the fire to extinguish it. Helping other people, training and preparing to do that – for me that has always been the most important part of the job.

Why did you have to stop working as a firefighter?

I lost the sight in my left eye after an explosion during a fire. It was a really silly accident, it was caused by a bottle of vinegar. I've often been annoyed about it, because over all the years I actually survived lots of much more dangerous situations without getting hurt.

What was the most fascinating thing about your job for you?

The way that every operation is different. So there's no real routine. It's



always a matter of finding the right way of approaching the immediate challenge facing you. Every operation stretches you, puts you in front of obstacles that you have to overcome using your own professionalism.

Just under two years ago, life faced you personally with the challenge of having to receive dialysis. How are you coping with it?

When I heard the term "dialysis treatment" for the first time in the kidney department, I was devastated. Unfortunately, my high blood pressure, half-controlled diabetes and triglyceride levels that were far too high led to several health crises. It took a bit of time, but then I saw that the dialysis was helping me.

Thanks to the treatment, I've been able to overcome the crises and stay alive. I realize now that an enjoyable life is possible even with dialysis, and I know lots of people who are managing to achieve it. Dialysis is helping me lead a relatively normal life as well. I have to watch my diet regulations and fluid limits. But the main thing is: I can still go on enjoying my family, my grandchildren, my friends and the things that are important to me.

Do you feel comfortable at the renal care center?

Since I started dialysis at the B.Braun renal care center in Málaga in September 2015, I can only say how happy I am at the center in every way – with the treatment and the care and attention I get. All the staff – without exception – help make the treatment hours more tolerable.

**MANY MANY
THANKS!**

THIS IS HOW YOU CAN GET THROUGH THE

Summer

Strong sunshine is a problem for dialysis patients. Here are a few tricks you can use to get through the hot season more easily.

1. Live like Mediterranean people do!

Include a long siesta in your daily schedule for the hot afternoon hours. Use the mornings and long evenings for activities instead.



2. Avoid direct sunshine!

Choose clothes that cover the body well, such as loose long-armed shirts and tunics. Before you apply any sunscreen, make sure all of the puncture sites have healed properly.

3. Sweat as little as possible!

As you can only drink up to a certain limit as a dialysis patient, circulation problems can develop if you lose fluids via the skin. So travel destinations that have moderate temperatures are better.

4. And if I get thirsty?

Even on hot days, the rule is still: spread out the amounts you drink across the day. Avoid very spicy foods and remember that soup already includes a lot of fluid, for example. Ice cubes, candy and chewing gum are good ways of distracting a thirsty feeling.

5. Enjoy a cool swim!

If your AV fistula has healed and there are no wound healing disturbances, you can take showers quite normally and you can also swim in the sea. Before you plunge into the waves, though, it's best to discuss it with your doctor again.



FAQs

QUESTIONS FROM PATIENTS

What happens if I miss a dialysis appointment?

Dialysis should not be missed out. Remember that the few hours it takes to clean the blood every week can only replace the healthy kidneys' round-the-clock work to a limited extent. If you don't keep an appointment, there is a risk of potentially life-threatening circulation problems, heart rhythm disturbances, or lung edema. If you're having difficulty getting to an appointment, always get in touch with your nephrology practice and arrange an alternative date promptly. Dialysis should always continue on schedule even if you have flu or other conditions that make bed rest necessary. If needed, your doctor can refer you to hospital for the dialysis. And if you've already started to feel unwell after missing dialysis: call an ambulance immediately!

How likely is it that my children will also need dialysis?

It depends a lot on the disease causing the condition. If you have a hereditary kidney disease, then there's a risk that your children may also be affected. That's the case with polycystic kidney, for example. Other causes, such as high blood pressure and diabetes, are also partly hereditary, but better and better ways of stabilizing these conditions medically are becoming available, so the need for dialysis can often be avoided.

Why does my skin get itchy during dialysis, while the person next to me doesn't notice any itching?

Itching occurs occasionally, but not often. It can have a wide variety of causes, such as local skin irritation or poor dialysis. That would be the case if some toxins are not being removed sufficiently. Speak to your nephrologist about it. He or she will check whether the vascular access may not be functioning optimally or the dialysis dosage is insufficient.

Why can't I get up during dialysis?

The body is best able to cope with the challenge that dialysis represents when you are lying down or sitting. After all, some of your blood is located outside of your body during the process, so that it is not involved in supplying oxygen to your tissues. That's why your heart has to do much more pumping work during the dialysis, which puts stress on your circulation system. If you want to move, it's possible to do some gentle physical exercises during hemodialysis (see "Fitness and Dialysis," p. 18).

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THE MAGIC
OF THE
AZURE COAST

“Sun, sea, sand and savoir vivre: For me, Antibes reflects the French lifestyle like no other destination.”

Rebecca Forbes, retired teacher from Great Britain



The world-famous towns along the French Riviera are strung like a pearl necklace along the coast between Monaco and Saint-Tropez: Nice, Cannes and in the hinterland Grasse, the legendary city of perfumes. The Côte d'Azur is a traditional paradise for travelers and still attracts tourists today. In the midst of it lies Nice's little sister, the town of Antibes, with its famous harbor with the yachts of the super-rich bobbing up and down in it, fine sandy beaches, and the breathtaking wild peninsula of Cap d'Antibes. And it's not just the jet set who feel at home in this lively and glamorous little town — it has long since also started attracting nature-lovers and laid-back sun-worshippers. And thanks to its first-class renal care center, Antibes is also an ideal place for dialysis patients to explore this place of special beauty. >

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SAVOIR VIVRE
IN THE HEART
OF FRANCE.



The Riviera renal care center (Centre d'Hémodialyse de la Riviera) is located directly in the hospital grounds, only a few minutes from the town center. It is available for holiday dialysis all year round and in the summer months offers

extra appointments in the late evening. Hemodialysis and hemofiltration are available, both to certified medical and technical standards.

In addition to the nephrologists responsible and the nursing staff, the regular team also includes a pharmacist, a pharmacy assistant, and a technician – ensuring maximum quality and safety during dialysis.



INFORMATION

Destination:

Nice International Airport,
travel via the N7 to Antibes (about 9 miles)

More information about Antibes is available at:

www.antibesjuanlespins.com

Renal Care Center:

CNA / Centre d'Hémodialyse de la Riviera,
Lieu dit La Fontonne,
103 Tes, avenue de Nice, 06600 Antibes, France

To plan your personal journey and appointments, you can contact the center by phone at:

+33 (0)4 93 95 12 93

E-mail: michele.crequet@avitum.com

You can relax during the treatment and use the time to leaf through travel guides and plan your next excursions. Swimming, boating, or visiting art galleries – there's a vast range of things to do. What about visiting the Picasso Museum, taking a stroll through the market hall (marché provençal), or going on an excursion into the hills further inland? In any case, you can enjoy France's joie de vivre in its purest form here – bon voyage!

Worth knowing: visitors can enjoy the French Riviera's climate outside of the summer months as well. Ideal months for dialysis patients to visit include the mild April, May and June, as well as the fall – sometimes even well into November.



How to get healthy

in the summer

RECIPE

A healthy diet can still be surprisingly exciting.

For decades, nutrition experts have had their eyes on the Mediterranean diet. Studies show that this delicious and highly varied mix of fresh fruits and vegetables, nuts, grains and healthy olive oils can play a major role in the protection and maintenance of many vital systems of your body. For dialysis patients, it's the perfect choice.



Here you can find more recipes for your healthy diet
www.bbraun-dialysis.com



GENUINE MOZZARELLA WITH FENNEL, BREAD SALAD AND BASIL PESTO

To make the pesto
 Puree the parmesan, the basil and the olive oil in a blender or mortar and pestle until it turns into pesto sauce. Add pepper and lemon zest to taste.

Tip: use plenty of high quality oil!

Mozzarella
 Cut the fennel bulb into delicate slices using a knife or grater, cook in plenty of water until soft. Next marinate it in white balsamic vinegar (2 tablespoons), honey, and pepper.

Cut the mozzarella into thick slices. Plate with the fennel and garnish with cherry tomatoes.

The bread salad
 Cube the two slices of white bread and half of a red onion. Smash the garlic and sear the bread, onion and garlic in a pan until golden brown.

- SERVES 4**
- 50 g parmesan
 - 1 handful of basil
 - 6 TBSP olive oil
 - Freshly ground pepper
 - Zest of 1/2 lemon
 - 1 squirt of honey
 - 2 TBSP white balsamic vinegar
 - 240 g mozzarella
 - 1/2 fennel bulb
 - 4 cherry tomatoes
 - 2 slices of white bread
 - 1/2 red onion
 - 1 garlic clove

Nutrition value								
Energy	Carbohydrates	BE	Protein	Fat	Potassium	Phosphate	Sodium	Water
375 kcal	11 g	0.9	19 g	28 g	297 mg	400 mg	483 mg	123 ml



You should certainly consult your doctor before starting with exercises. And when you find something that's fun for you — keep at it. Your body will feel the benefits.

Fitness and Dialysis

– A PERFECT MATCH!

Exercise is the best medicine! And the same also applies to people who have kidney disease. Regular exercise not only allows you to enjoy life more, it also improves blood pressure, metabolism, and usually your weight as well. And the best thing is: you can also use your dialysis time for exercise. Special exercise machines, as well as simple strength exercises that you can do while lying down or sitting, make it possible.

patients who have restricted mobility, simple strength exercises such as li-fting the legs and bending the hips in the recumbent position can often be recommended alongside stamina exercise machines. Muscle training often helps patients become much more mobile. There are even some patients who are able to come to dialysis treatment on foot again, instead of with the ambulance service.

A bicycle in a renal care center — it sounds a bit far-fetched at first. But exercise equipment such as a recumbent exercise bike are being seen more and more often in treatment rooms. Group gymnastics programs are often offered for patients during dialysis as well. Combining dialysis with an exercise program — the benefits are obvious. First off, there's the health aspect. Then there's the element of fun involved, since keeping fit together with others promotes well-being. Many patients find it difficult to include exercise in their schedule on top of their dialysis appointments. No wonder patients



A few of the strength exercises that are easily done during treatment include shoulder presses, lateral raises, bilateral leg raises and triceps presses.

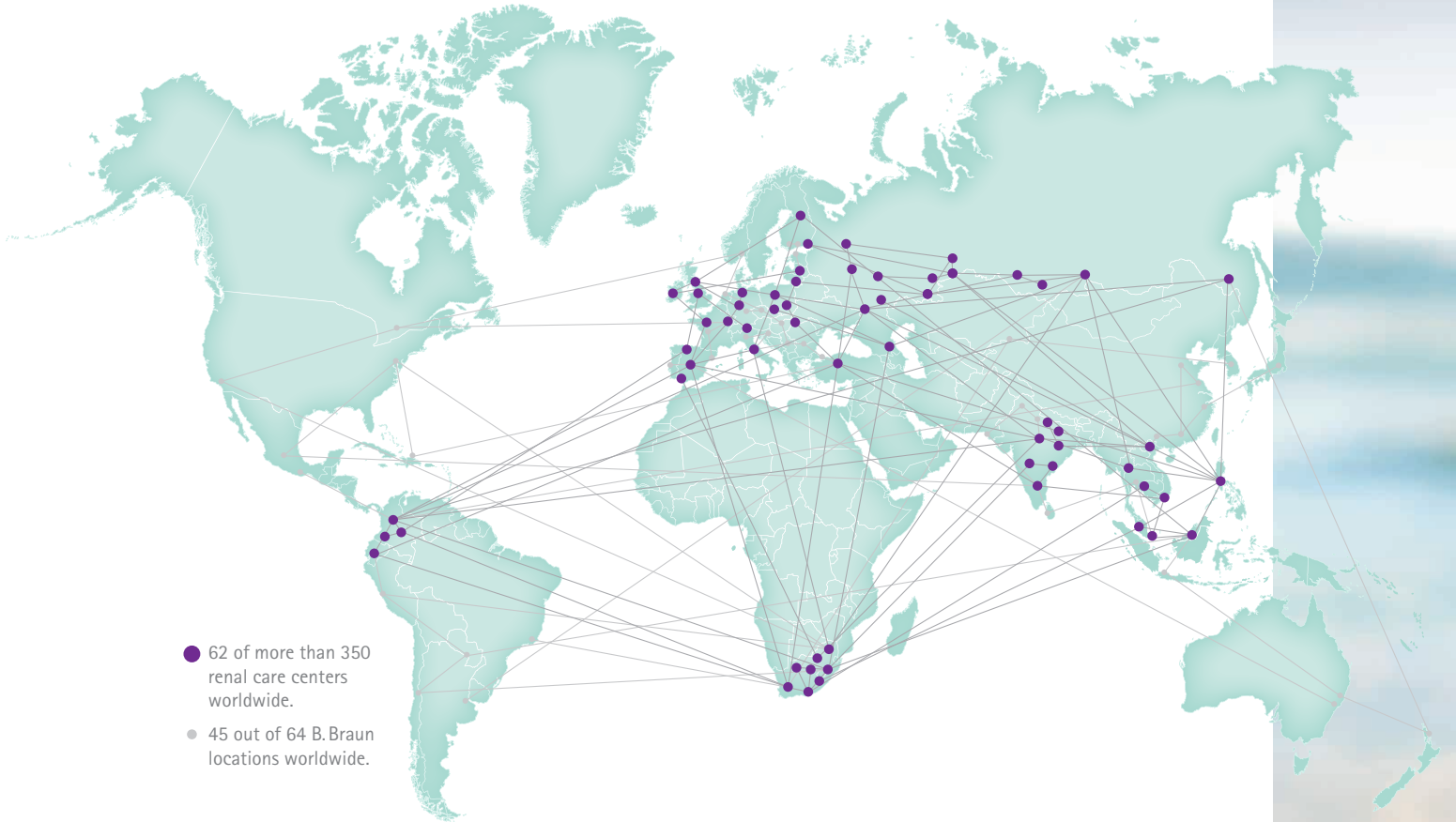
The trained staff at your center will of course always make sure that no medical complications (such as a slipped needle) happen during the training exercises and that the intensity of the exercises is adjusted to your needs.

Here you can find useful videos for your health & fitness
www.bbraun-dialysis.com



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