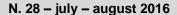


Oxygenate yourselves! -The Hyperbaric Centre Magazine





In 2010 the Hyperbaric Centre of Ravenna started a new experience with the blog www.iperbaricoravennablog.it. The aim of the blog was to share the stories of the patients because we believe that the solution to the problem of one person is the solution to the problem of so many others. This experience led to "Oxygenate yourselves!", The blog magazine of the Ravenna Hyperbaric Centre. The magazine is a new tool to read and preserve the most widely read stories. This number contains the articles most-read in March and April 2016. Enjoy the reading!

Cristiano Ronaldo choose Hyperbaric Oxygen Therapy to speed up injury's healing process



The football player Cristiano Ronaldo knows that he can use the hyperbaric chamber to recover faster from his injury. The first degree sprain to the internal ligament of the left knee, consequence of the collision with Payet during the European Championship final, can be cured quicker and he can go back to play soon.

Specialist doctors had forecasted four week of complete rest before he could start physiotherapy and training, but thanks to one or two daily sessions of 100% pure oxygen, inhaled at a high pressure level in the hyperbaric chamber, his lesion will be soon healed.

Hyperbaric Oxygen Therapy is an already known ally for athletes and it's proven to have positive effects in speeding up the healing process of ligaments and bones.

In 2010 Valentino Rossi heal within record times from a bad fracture on his right leg thanks to a daily session of Hyperbaric Oxygen Therapy (that he called "the philosophic hyperbaric chamber") at the Hyperbaric Centre of Fano after our director Dr Pasquale Longobardi assessed his case and identified the best treatment.

However, one of the first relevant success' stories of this innovative treatment is dated back to the'90s. Do you remember the motorbike champion Mike Dohan? Dr Costa and his mobile clinic (the moving hospital that follows bikers) treated him after his accident in Assen, in Holland.

During the surgery some complications arose and Dohan was brought to Italy for a further surgery. Finally, he arrived at the Hyperbaric Centre of Ravenna to be treated in the hyperbaric chamber in association with a rehabilitative treatment.

After the experience with the bikers, it's now the time for the hyperbaric oxygen therapy to put (quickly) Cristiano Ronaldo back on his foot.

However, it is not necessary to be an athlete champion to enjoy the benefits of the medicine that comes from the sea. Every day, at the Hyperbaric Centre of Ravenna, we treat with success a large number of patients with this kind of problems.

We wish the best of luck to Cristiano Ronaldo, we can't wait to see this champion back on the field, playing like the football star he really is.

Ulcers in diabetic patients: Klarida Hoxha explains how Giuseppe's father can heal



Good morning,

My father is diabetic and nearly four months ago, a simple scratch in his left leg, below the calf, developed into an ulcer. Now he is slowly recovering. We are following the treatment indicated by the doctor. Also, a nurse visits and medicates him every day.

In order to speed up his healing process I wanted to try the hyperbaric chamber treatment, but I was discouraged to do so as my father is suffering from cardiac arrhythmia, allergy and hypertension.

He is enduring excruciating pain. Whilst he can bare it during the day, he can't stand it at night. Only by administering Voltaren and 20 drops of Toradol he can be relieved from the pain.

I wanted to ask you if there is any medication that can help a bit better with the pain relieving and how long the ulcer will take to heal completely.

These are the drug he took without success: Targin from 0.5 and 10 and 20.

Looking forward to your answer.

Kind regards,

Giuseppe

Klarida Hoxha, nursing coordinator, responds



Good morning Giuseppe,

Thank you for writing us about your father's situation. I am very sorry for him and I hope you can

find a solution as soon as possible.

The presence of ulcer in a diabetic patient affected by multiple diseases it's a difficult situation that requires a team of experts to identify the best diagnostic-therapeutic treatment.

Ulcers develop very often from simple trauma and therefore evolve in more serious situation due to other general health conditions. In order to heal it is necessary to evaluate all the possible aspects of the situation and to identify a suitable and personalised treatment.

In your first visit at the Hyperbaric Centre of Ravenna you would be assessed by a team specialised in the treatment of difficult wounds. They would firstly evaluate the blood circulation through:

- Transcutaneous oximetry (TCPO2) that measures the quantity of oxygen that reaches the foot
- Doppler- Laser blood-flow velocity recording, which enable us to see the micro-circulation and identify any eventual signal of neuropathy (aka the modified sensitivity generated by the presence of glucose in the blood). This test is also used to predict the success of the hyperbaric chamber in the eventuality that the patient needs it
- Tactile sensitivity through Semmes-Weinstein monofilament: it consists in "pinching" the foot in precise areas and it is predictive of the occurrence of ulcers (in case there is no response to 3 out of 6 "pinches")

It is necessary to undertake an arterial-venous ecocolour-Doppler, in order to define better the status of blood circulation. Also, it is necessary to do a good check of sugar level in the blood and to depict the situation of all the other disease of which your father is affected (i.e. hypertension, heart disease).

For those patients who already have a complicated clinical situation, or when the healing process appears too slow, the hyperbaric treatment might be deemed necessary. The hyperbaric doctor analyses the test results and decides if the patient is eligible for the hyperbaric treatment or if further tests are required.

Regarding the pain, I would advise to visit an antalgic specialist. The Turgin is a medicine that has a different dosage depending on the patient as it depends on the personal pain resistance. It is common practice to increase the dosage slowly until the patient feels better, without causing side effects. If this occurs, the doctor would change the dosage and the drug.

Also, the pain is normally due to something that is wrong elsewhere (as for example a circulation deficit), therefore it's even more important to evaluate all the aspects I explained above.

If you wish to contact us to book a visit you can call out office at the number 0544 500152 or send us an email at segreteria@iperbaricoravenna.it.

Best wishes, Klarida Hoxha

Dorsal spondylodiscitis and paralysis: What can Giorgia do for her father?



Kind staff,

I want to ask you information regarding the use of hyperbaric oxygen therapy for a specific case. This year my father, following numerous wrong diagnoses, was finally diagnosed with spondylodiscitis located in the 4th and 5th dorsal chest vertebra, now "eaten" by the infection.

Today my father is responding well to the antibiotic therapy and the PCR value is notably lower. However, he is still paralysed from his mid chest down, and with his lower libs, he also lost the use of urinal-intestinal functions (sorry for the lack of scientific jargon).

The injury at the spinal cord has been classified as A-type, and he was told that he would never walk again. We don't want to give up and we are still looking for alternatives treatments. For this reason, I would really like to know your opinion.

Kind regards, Giorgia

Dr. Andrea Galvani, responds



Dear Giorgia,

Thank you for writing us. I am very sorry for your father's situation. In order to give you a complete

response I need to address separately the pathologies you introduced.

For what concerns the infection, the hyperbaric oxygen therapy is surely indicated. However, it is very important that the patient continues the antibiotic therapy (prescribed by the infectious diseases specialist) and that he is constantly followed by the surgeon that is treating him.

The combination of these treatments gives the patient the possibility to heal or at least to improve the infection situation. At the Hyperbaric Centre of Ravenna we had treated various cases like this in the past.

Regarding the neurological aspect, there is no scientific evidence that support the therapeutic effects of the hyperbaric therapy for this problem. I apologise if the answer seems a little "vague" but considering the whole clinic framework it's difficult to give you a precise answer without a careful analysis of the available documentation or an accurate medical visit.

If you wish, you can send the documentation by fax at the number 0544 500152 or by email at segreteria@iperbaricoravenna.it. I am happy to go through it carefully and get back to you.

I am available for any further questions.

Best wishes,

Andrea Galvani

Degree in Medicine and Surgery at the University Alma Mater Studiorum of Bologna, Order of Physicians and Surgeons of Rimini: n. 02337

PRP treatment against baldness at the Hyperbaric Centre of Ravenna



Baldness is making me feel uncomfortable. I was wondering if the PRP treatment could give me some hair back, to what extent the treatment is actually effective and how much would the full treatment cost.

Kind regards, Diego

Dr. Claudia Rastelli, responds



Dear Diego,

The PRP (Platelet Rich Plasma) is a good treatment of regenerative medicine for alopecia problems, and I'll tell you why.

The autologous PRP treatment consists in taking a sample of the patient's blood, process the blood in a centrifuge and, once the platelet is separated, it is re-injected in the scalp. The PRP efficiency is due to the presence of platelet factors that have a

growing power and activate the stamina cells in the follicle of hair bulb.

These factors stimulate the stamina cells of the follicle to produce hair and they work to regenerate and keep healthy the inactive hair follicles.

The immediate effect is that the hair is reinvigorated, stronger and less likely to fall. According to scientific literature, hair growing occurs in 60% of the patients, showing significance positive changes, especially if treatments take place at the initial stage of alopecia. The protocol of the treatment suggests an initial phase of 3 sessions every 20-30 days.

This phase is followed by a phase of maintenance during which injections will be done every 6 months.

I also recommend a home therapy based on polynucleotides, to reinforce the effects of the clinical treatment.

For an assessment of your condition or for further information, please contact our office at 0544 500 152 or send us an email at segreteria@iperbaricoravenna.it

Regards,

Claudia Rastelli

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Ulcers to the lower limbs due to genetic thrombophilia: what to do



Good morning,

I am writing you because I am seeking help for my mother. Since when she was 19 years old, she had problems of trophic AAII ulcers, removal of Safena vein, genetic thrombophilia, double heterozygosis G 1691A and H1299 (R2) factor V and double heterozygosis C6777T and A1298C and MTHFR.

She carried on all her life with this problem, to the left leg in 1985 and to the right one in 1996. Eight years ago she started a treatment with a doctor from Turin and she had done various grafts. The one that last longer resisted one year, but we still haven't solved the problem and she is enduring unbearable pain.

In May 2013 she was diagnosed with a multiple myeloma IgGK and she was treated in the haematology ward of the hospital Sant'Anna in Cuneo.

Her stamina cells were collected on November 14th 2013, and on November 22 she underwent her first transplant, but without success. On March 4th 2015 she finally found a donor and went on with the stamina cells transplant.

Today, the situation of the myeloma is stable. Now the biggest problem is represented by the ulcers, which caused her an undefinable pain. She underwent the last graft on January 28 2016, but the wound is still open even if we are carrying on with the medications. Unfortunately, another ulcer was developed on the right leg. This required another graft, which is planned for June 29 2016.

So far, I couldn't see any positive result. I read your blog, which I found very interesting, and I'd like to know your opinion and eventually if it's necessary to visit your centre.

Looking forward to your answer.

Best regards, Loredana

Klarida Hoxha, nurse coordinator, responds



Dear Loredana,

Thank you for writing us. I am very sorry for everything your mom had to go through. We know and we

have a great esteem of the doctor that is treating your mother.

Genetic thrombophilia is an alteration of the coagulation factors that people have since birth. Unfortunately, there is no cure.

Knowing the problem, the only thing that can be done is to correct the life style. For example, avoiding smoking, avoiding putting on weight, doing physical activity and following a suitable diet. Regarding the diet, I want to be more precise:

- -vegetables and fruits are rich in folic acid. This vitamin, contained also in spinach, lettuce, strawberries and kiwi, seems to be effective in reducing the level of homocysteine in the blood. This is an amino acid listed among the proinflammatory drugs that increase the risk of thrombus.
- blue fish, rich of acid omega-3 that has positive effects on the platelet functions, avoiding clots
- dark chocolate: has an anti-inflammatory action, doing a positive activity on the blood vessels. It is also capable of increasing the antioxidant effect of Acetylsalicylic acid (commonly known as aspirin)

However, the most important thing is the use of bandages (compression therapy) during the phase of ulcer development. Alternatively, elastic therapeutic socks can be used for prevention.

There are various types of bandages and various methods of applications. At the hyperbaric centre of Ravenna we treat situation like yours with a multi layers bandage that includes: bandages medicated with coumarin. This has an anti-oedema forming effect (reduce the swallow of the legs), cotton bandage to avoid the coumarin to be absorbed by the bandage itself. In this way we will maximise the coumarin effect on the leg skin.

Then, we apply a bandage of German cotton, to uniform the leg in order to be able to perform a decreasing pressure (often the ankle is thinner and the calf looks like an upside-down bottle).

Finally, we apply the bandage that actually does the compression (also this one can be of various types depending to the patient) and a final bandage to fix it all.

This kind of bending must be done by expert personnel because if it's done without the right level of pressure it may cause additional damage.

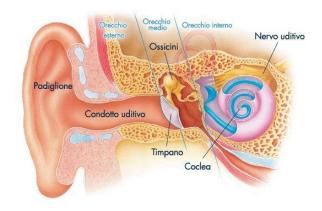
In this kind of ulcer the pain is common and the patient needs a careful evaluation for the pain therapy. Painful ulcers usually have a long healing process.

Considering all the other complications that your mom had in the past (as the multiple myeloma) the doctor might deem necessary to carry a biopsy to run out hypothesis of additional worse complications.

We are available for any further clarification. To book a visit you can contact our office at 0544 500152 or email segreteria@iperbaricoravenna.it

Best wishes, Klarida Hoxha

Hyperbaric medicine and Meniere syndrome



Good morning,

I have been diagnosed with the Meniere syndrome. In the last 8 months I felt my ear like "full", I had sensorineural hearing loss, vomit and a strong tinnitus.

I have too low blood pressure to take diuretics (100/60 and sometimes even lower). At any rate, this drug wasn't useful after the first time I took it. It helped with the tinnitus and with the feeling of "fullness", but only for a short amount of time. Also, I am taking Vertisec for the vomit.

I started to do hyperbaric oxygen therapy in my town and I am already at the fifth session, but I can't see any improvement.

The doctors are sceptical about future improvements: they said that improvements should be seen within the fifth or sixth sessions, otherwise it's not worth to continue with the therapy. I am feeling very discouraged, what should I do?

Best, Caterina

Dr. Andrea Galvani, responds



Good morning Caterina, Thank you for writing us. I am very sorry for your situation.

Hyperbaric oxygen therapy is recommended in cases like yours.

The guidelines book reads: "variations of external pressure determine variations of volume in the medium ear. Thanks to the introversion of the tympanum's membrane, through the chain of little bones, pressure waves are created in the prelymphatic sector (internal ear); therefore these waves get to the endo-lymphatics sector facilitating the flux of endo-lymphatics sack. In conformity with this rationale, oxygen therapy can be used at pressure level 2.5 ATA" (SIMSI guidelines 2015).

Regarding the number of the session, the protocol currently applied at the Hyperbaric Centre of Ravenna suggests an initial cycle of 15 sessions, followed by further cycles of 10 sessions to be done every 4 to 6 months.

Given the evaluation of the colleagues that are currently treating you, I would suggest to continue with the therapeutic scheme and to wait to see results.

For further information please contact our office by phone at 0544 500 152 or by email at segreteria@iperbaricoravenna.it.

I wish you the best of luck, Andrea Galvani

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