#### THE INTERNATIONAL HYPERBARICS ASSOCIATION, INC.

## Pressure Point

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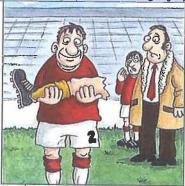
#### Olympic Focus on Hyperbaric Healing: NEWS?

hatever the consensus happens to be on hyperbaric healing in the sports world this week, it certainly coincides with the Beijing Olympics this year.

The following articles highlight the use of hyperbaric medicine by some of this Olympics' athletes competing in the 2008 games.

In particular, note the popular trend to accelerate healing of wounds and injuries with the use of hyperbaric oxygenation of muscle tears, knee swelling, and even an attempt to save a severely crushed leg. As the Olympians employing these healing methods relate, there is a new hope given them that previous medical remedies of the past s have not been able to address—namely the reduction of edema, lactic acid build up, cell death, and angiogenesis in a timely fashion.

### Brian was dropped from the team after picking up a NASTY leg injury



Humor as Medicine

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# MIRACLE DRUG CD. RESEARCH O DO O

We need a bigger bottle to list all the side effects

Sports Injury News

## Hyperbaric "Knee" Relief for Israeli Fencer

sraeli fencer, 27-year old Delia Hatuel's participation in the Beijing Olympics is largely due to hyperbaric oxygen treatment received at Assaf Harofeh Medical Center in Tzrifin for an injury to her knee last month.

According to her doctor, Shai Efrati, Delia's knee swelling was resolved with the use of the hyperbaric chamber which he directs. In fact, in preparation for her events at the Beijing Olympics, Delia underwent seven more treatments.

For Delia and other patients with sports injuries, exposure to oxygen under higher atmospheric pressure enables wounds to heal, lactic

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2008 Olympics

acid to resolve from the muscles and generally hastens healing in the body.

Other effects of hyper-baric oxygen

on the body include the increase of both white cells that fight pathogens and collagen cells that rebuild bone.

The 27-year-old, regained fitness in her left knee just in time for the Olympics, but just 70 seconds into Monday's first round fight against Russian Viktoria Nikichina collapsed to the ground and looked to be out of the Games.

(Continued on page 4)

Sports Injury News

#### South African swimmer fulfilling dream derailed

By Jere Longman/ New York Times

BEIJING—Natalie du Toit carried the flag for South Africa at the opening ceremony of the Beijing Games. She wore a prosthetic leg, but few likely noticed. She has long awaited this moment, when she can stop being a disabled swimmer and start being just a swimmer again.

Wednesday (Tuesday night in Detroit), du Toit will participate in the Olympic marathon swim with no lower left leg or prosthetic assistance to help her kick through 6.2 miles of open water, competing as the first female amputee in an able-bodied Olympics.

Unlike her countryman Oscar Pistorius, who sprints on a pair of carbon-fiber legs, du Toit has provoked no debate about whether she has a competitive advantage in her event. There is no benefit to a lack of kicking power, symmetry and buoyancy when you make your living as a swimmer.

"This is something I've dreamed about since I was 12 or 13," du Toit, 24, said of competing in an Olympics. "I didn't dream of having a motorbike accident and losing my leg so I could go to the Paralympics."

She will participate here, then stay for the Paralympics in September. So will Natalia Partyka, a table tennis player from Poland who was born without a right forearm. Pistorius cleared a legal hurdle en route to the games, but fell a second shy of the eligibility standard to run the 400 meters.

Du Toit qualified with a fourthplace finish at the open-water world championships in May.

At 16, du Toit nearly qualified for the 2000 Sydney Games in three events. On Feb. 25, 2001, as she aimed for the 2004 Athens Olympics, du Toit left training one morning in Cape Town, headed for school on a motorbike, when she was struck by a car that pulled out of a parking lot.

"I've lost my leg, I've lost my leg," she began screaming.

Her left leg was still attached, but the bones were splintered, the muscles ruptured. "Burst like a tomato dropped to the ground," du Toit said.

A titanium rod was inserted to stabilize the femur in her injured leg. An artery was transplanted from the right leg to the left and she was given 24 units of blood.

The leg was placed in a hyperbaric chamber in a desperate attempt to spur some knitting of the shattered bones.

Doctors considered harvesting muscle from her back and hips to try to refashion the leg. After a week, they surrendered to the inevitable. Du Toit's left leg was amputated at the knee.

Five months later, she jumped back in the pool. Her first workout exhausted her after 25 meters, but at least she was swimming again, more out of curiosity than determination.

"I just wanted to see what would happen," du Toit said.

She felt somewhat rudderless, especially in the breaststroke, which requires a snapping of the legs for propulsion. "I ended up more or less swimming in circles," she said.

Eventually, du Toit learned to compensate.

In 2002, du Toit qualified against able-bodied swimmers for the final of the 800-meter freestyle at the Commonwealth Games in Manchester, England. This had 2008 Olympics



never before happened in the modern era. Du Toit was named athlete of the meet ahead of lan Thorpe. A year later, again against able-bodied swimmers, she won the 800 freestyle at the African Games.

A poem, hung on her wall, provided du Toit with laminated inspiration:

The tragedy of life does not lie in not reaching your goals;

The tragedy of life lies in not having goals to reach for.

Once, du Toit said, people seemed to notice her disability before they noticed her. Now that has begun to change. Still, there are bad days, sure.

Du Toit can no longer run. In the pool, her times are much slower than they once were. Her upper left leg is about seven inches in diameter smaller than the right. It floats behind her in the water, withered, useless for power.

Her right leg works overtime, cramping in long races. Exhaustion drops her hips low into the water. A chiropractor must balance her body.

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#### Sports Injury News



Chris
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... Happy he
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Reaching for the sky: but Tomlinson's Olympic hopes lie in an oxygen tank

The Times, Rick Broadbent in Beijing

**Aug 8**—Chris Tomlinson is banking on two pints of milk and a hyperbaric chamber to get him fit in time for the Olympic Games.

The British long jumper, who would have been a long shot for a medal in Beijing, is still at home in Hampstead where he is receiving intensive treatment on his torn right calf muscle. "UK Athletics have put me on a diet of multivitamins and said I should drink two pints of milk a day," he said. "I'm not too fond of the stuff but I'll do anything to make it to Beijing."

Tomlinson suffered the injury during the Aviva London Grand Prix at Crystal Palace a fortnight ago and, after initially thinking it was only cramp, received the devastating scan results that revealed a grade two tear.

"I'm also undergoing daily treatment in a hyperbaric oxygen chamber at the London Diving Chamber at St John's Wood, where I'm breathing in pure oxygen for sessions of an hour and 40 minutes at a time," he said. "Usually, it should take four weeks to heal but I haven't got that lona."

The good news for Tomlinson is that the injury is not to his take-off leg as the doctors fear that would not have taken the strain of competition. Now Tomlinson is facing a race against time to make it to the runway for the long jump qualifying round. The bad news for him is that that takes place on

only the second day of the athletics competition a week tomorrow. Already, Tomlinson has had to alter his plans to fly out to the training camp in Macau and acclimatize.

Dave Collins, the UKA performance director, said Tomlinson was doing everything he could to make a dramatic late entrance. Apart from winning a silver medal at the World Indoor Championships in Valencia in March, the British record holder has suffered a mediocre year, although a marginal no-jump of 8.40m at the Olympic trials showed his potential.

**Aug 12**—Chris Tomlinson has won his fight to be fit for the Olympic long jump and was scheduled to fly out to Beijing last night. The British record-holder has been receiving intensive treatment on a torn right calf muscle in a hyperbaric oxygen chamber but has decided that he is ready for Saturday's qualifying competition.

The Northern Echo.co.uk

**Aug 18**—CHRIS TOMLINSON may have won his fitness battle to get to Beijing but he lost the war after failing to qualify for today's long jump final.

Doctors told Tomlinson he had virtually no chance of making the Olympics after tearing his calf just five weeks ago. On Saturday the 26-yearold proved them wrong but paid the price for such an interrupted build-up, posting a best jump of 7.70m.

That left the Teessider 27th overall and 24cm away from a second Olympic final.

Despite spending hours in oxygen tanks and flying into China just days before the competition, Tomlinson maintains he can go away with his head held high.

He said: "Of course it is disappointing to finish where I did but if I had not come to these Olympic Games then I would have never have known if I was in good enough shape.

2008 Olympics

"It was always going to be a big gamble but at least I can go away knowing that I tried my best.

"As a person I like to have some fighting spirit and when I saw three weeks ago that I had an 80 per cent chance of not going to the Olympics, it was always going to be an uphill struggle but I gave it everything I have got.

"I am very aware when I was at the World Championships in Osaka last year I left the qualifying feeling I had not given it my all. But at least today I can think I gave it everything. There's no regrets."

Before injury struck Tomlinson was thought to be one of Britain's best track and field medal prospects after his silver at the World Indoor Championships earlier this year.

The British record holder has always been capable of monster leaps but the calf tear – the latest in a long line of unfortunate setbacks – once again prevented him from converting his potential into medals.

And while teammate Greg Rutherford will be competing in the final after automatically qualifying with a jump of 8.16m, Tomlinson admitted it was always going to be a tall order to join him there.

He said: "I tried my best but unfortunately it was not good enough. At least I can go to bed knowing that I tried.

"My calf has been good but it was everything I missed out on during the season with viruses and injuries. It was a catalogue of problems and it saw me wanting today.

"Every athlete has to be positive in the head. I believed today I was capable of jumping a British record, that I was capable of jumping massive.

Clearly I wasn't."

After the excitement of catching his flight to the Chinese capital, on business class no less, the

(Continued on page 4)

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The International Hyperbarics Association, Inc., is a coalition of doctors, parents, patients, corporate professionals, hyperbaric center owners, and above all members who are committed to the cause of medical hyperbarics.

Our members come to us from all geographical areas with one common goal— to share their knowledge regarding the latest hyperbaric news. Our driving force is our members, who are committed to do all we can:

"to give life to the world."





#### Hyperbaric "Knee" Relief for Israeli Fencer conclusion



She did, however, get back on her feet and eventually only succumbed 10-9 in extra time after a brave fight.

"I'm very sad, but this loss has nothing to do with my injury," said Hatuel. "I'm out because I lost my concentration in the tiebreaker

#### 2008 Olympics

and she made a winning move. My knee didn't hurt me and I didn't feel any discomfort."

Despite the defeat Hatuel doesn't regret coming to Beijing in her current state. "It was worth coming. I fought as if I was healthy.

Unfortunately, I'll be thinking of the mistake I made in extra time for many more days, but I'll be back."

#### Chris Tomlinson conclusion

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plane home will be a very different experience.

Tomlinson has already committed to competing at a meet at Gateshead but revealed that will be his last jump of the year.

#### 2008 Olympics

He added: "I am going to go up to Gateshead, where I have got a local meeting. Then realistically I will probably knock the season on the head.

"I will do Gateshead with a local crowd, but physically if you are not at the races, you are not at the races."

#### South African swimmer fulfilling dream derailed conclusion



"There are a lot of dark moments," du Toit said. "Everybody goes through flashbacks. Obviously, there are some days when I cry. But I try to remember that better days are ahead. You just go on. If you want to get there, you go on."

Open-water swimming requires less insistent kicking, though it does not adhere to the niceties of swimming in a pool. For one thing, there are no lanes. The close-quarter thrashing, like the water,

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can get rough. Group turns around marker buoys can resemble aqua-NASCAR.

"In the water, I'm just like everybody else," du Toit said. "They wouldn't hold back, saying, 'There's a disabled athlete, I'll go slower."

That is all she has wanted. To be just like everybody else.