

**TESTING OF THE CRYOTRON
BY THE
FRENCH ICE SPORTS TEAM**

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Ice skating and dancing is sports where sliding, technique and power often have to be combined. The constraints are numerous: contusions and sprains are generally severe.

As in all high level sports, tendinous and muscular lesions are the result of a very high workload during training (general physical preparation + 4 to 6 hours on the ice + dance and choreography every day)

The Elite French Ice-Skating and Dance Championships took place at the Charlemagne Ice Rink in Lyon on the 17, 18, 19 and 20th December 1998.

I have been a sports physiotherapist in Lyon for ten years (three seasons with the French alpine skiing team, and now the French ice-skating team), and I have always kept an eye open for techniques that were likely to give me quick and efficient results, as competition does have particular requirements. My attention was caught by the increasing reputation of the results of the CRYOTRON. Therefore I had the opportunity to test the effects of gas cryotherapy “on the field”, thanks to Mr Vincent ANDRIEUX and the whole team of Cryonic Medical.

We, doctors and physiotherapists, very quickly understood (our long experience is the guarantee of what we are suggesting) that the properties, i.e.: intensity of the cold at -78°C and a pressure of 50 bars, offered therapeutic possibilities that were totally out of proportion (the action mechanisms being essentially reflexes) with the more traditional ice vessel or the spray. The enthusiasm of the medical staff and the sportspeople was immediate and the Cryotron quickly became the “attraction” of the infirmary.

Thus we obtained:

- **For contusions:** an instant and long-term efficiency on all shocks, blows and falls on the ice with quasi-immediate reuptake of training. The quick fall in cutaneous temperature (32 to 2°C) in less than 20 seconds explains this powerful action on the nociceptive system.
- **For effort contractures:** we have to admit that we were very surprised. Indeed, the use of ice vessels or packs was not indicated in this type of pathology. But then again, the reflex effects brought on by the “thermal shock” and in particular the vasomotor effects (vasodilatation peak of 117% in 20 seconds) explain the fast sedation of all contractures. This action certainly opens some good perspectives to the technique in the sports world.
- **For the sequellas of sprains:** a short, punctual treatment on fibrosed osteo-tendinous areas allowed to lift the ischemia in the sequellas of tendinous lesions and to anaesthetize the pain locally. The competitor can therefore execute his program without any apprehension.

During this championship, we did not have any fresh lesions such as sprains or strains. Therefore we cannot objectively make any statement, however the numerous accounts of those that use this technique do not leave room for any doubt as to the benefits of gas cryotherapy on this type of pathology.

After four days of trials, we (sportspeople, doctors and physiotherapists) unanimously adhered to the CRYOTRON. It seemed to be an indispensable tool in the therapeutic arsenal of those who have obligations towards rapid results in the world of sport.

Once again, I would like to thank Mr Vincent ANDRIEUX and the CRYONIC MEDICAL team for their collaboration.