Customers lining up for high-cost hyperbaric therapy

Heather Kent

t 7 m in length and weighing in at almost 12 000 kg, the cavernous hyperbaric chamber that fills the concrete-walled room at the Hyperbaric Health Care Centre in Coquitlam, BC, is not your typical piece of medical equipment. And it's as controversial as it is big.

The BC centre opened in December 1998, becoming Canada's first private hyperbaric facility with a "multiplace" unit that seats 14 people. The only similar facility in BC is the public chamber at the Vancouver Hospital, which normally limits treatment to the 13 conditions currently designated by the Undersea and Hyperbaric Medical Society as having a valid scientific basis for therapy; these include carbon monoxide poisoning, severe crush injuries and air embolism. Hyperbaric chambers are also commonly used to treat people who have been in diving accidents, but the new BC centre is looking toward an entirely different market.

People with multiple sclerosis, chronic fatigue syndrome and some cancers have already used the centre, says Frank Tremblay, the technical director. However, most of the clients to date have been children from Quebec and Ontario who have cerebral palsy. They come to BC for 2-week periods and undergo treatment twice daily. About 30 children have made the trip so far. The interest in Eastern Canada was spawned by Claudine Nadeau, the Montreal mother of twin boys with cerebral palsy, who is also a director of the Hyperbaric Oxygenation Corporation.

Many physicians, meanwhile, remain convinced that hyperbaric therapy will have no effect on patients with cerebral palsy. Doctors have said the same thing in other countries, too, but that hasn't stopped hyperbaric oxygen therapy from becoming very common in both the US and Britain, where about 60 private facilities already exist.

The burgeoning interest attracted Tremblay and his business partners, who felt that the timing was right for a similar service in Canada because of growing interest in alternative medicine. They appear to have been right. "We are booked until June," says Jean-Paul Tremblay (no relation to Frank), the centre's clinical director.

New hyperbaric chambers cost more than US\$1 million, so the partners scoured North America for a secondhand one and eventually discovered a 20-year-old unit in Seattle.

It's a lucrative business. The centre charges \$100 per 90-minute session, which Frank Tremblay describes as "one of the lowest treatment costs in North America."

When people arrive requesting treatment, the centre asks the family doctor for the patient's history. This is then forwarded to the centre's medical director, Florida radiologist William Maxfield, who has an extensive background in



Hyperbaric chamber: \$100 for 90 minutes

hyperbaric medicine. He decides on treatment protocols, including the duration and numbers of treatments and the "depth" to which the patient is taken in terms of pressure.

Before commencing treatment, all patients are examined by Dr. Jim Grant, a retired family physician who ensures that clients' eardrums can withstand the pressure changes and that clients have no surgically implanted electronic devices such as pacemakers. Patients also sign a consent form.

The children treated for cerebral palsy have ranged in age from 8 months to 15 years. During the sessions they are accompanied by their parents, who are not charged; a maximum of 7 children are in the chamber at a time. Clients wear vinyl hoods with latex neck seals, which act as containers for the pure oxygen breathed in the chamber. Plastic hoses are connected from the hoods to individual control units above each person's seat. (Clients must purchase this equipment for \$150.)

A technician communicates by radio with an attendant who remains inside. Pressurization with compressed air begins at a rate of 30 cm (1 ft.) per minute, and continues for about 20 minutes. The children are taken to a depth equivalent to 7.6 metres (24.8 feet), although the chamber is capable of reaching much greater depths.

During sessions parents can read and talk to their children, who are often put to sleep by the droning oxygen units. Jean-Paul Tremblay says side effects are minimal — some children may become hyperactive — and transient.

Although many physicians doubt that this type of therapy will cure or reverse brain damage, Jean-Paul Tremblay does not appear to be deterred. He hopes to move the chamber to a multidisciplinary centre and the company also plans to expand to Eastern Canada.

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