

## **Live Cell Tissue Extracts: Little Known Therapy With Great Promise**

**By James L. Wilson, PhD**

Live cell therapy is a unique and increasingly popular method of treatment for many conditions in which live whole cells or cell extracts are administered in their natural form. Although centuries old, new refinements in technology have made this form of therapy a treatment mode that is on the verge of exploding. Why? Because live cell therapy offers something that vitamins, minerals and other natural treatments cannot. It can provide the exact components necessary for the injured or diseased tissue to totally heal and sometimes regenerate. Live cell therapy has several names. It is also known as cellular therapy, live protein extracts, live cell fractions, tissue extracts, organotherapy or live cell extracts. It arises from the old adage that like cures like, in that when an organ or tissue is diseased and the same healthy organ or gland from the same or another species is given, it results in the strengthening and/or healing of the affected organ or gland. The tissue used for live cell tissue extracts is typically from the organs or glands of sheep, cattle, pigs and more recently from the cartilage of shark.

### **History of Live Cell Therapy**

Cellular therapy is in reality several thousand years old, with the earliest references being found in the Kama-sutra, an ancient East Indian sanskrit text, in which a decoction of buck testes and milk was prescribed as a strength giving remedy (Harrower, 1932, pg. 21). The Papyrus of Eber, another ancient medical text, described preparations manufactured from animal organs to be given therapeutically (Niehans, 1960, pg. 10). We find that Hippocrates used the corresponding healthy organs of animals for relief of diseased organs in humans (Harrower, 1932, pg. 21). Although there were significant experiments from notable researchers such as Claude Bernard (1835) and Alexis Carrel (1912), live cell therapy in Europe began in 1931 with Dr. Paul Niehans.

Modern live cell therapy started, as do many medical discoveries, by accident. A young surgeon had accidentally irreparably injured the parathyroid of a patient in the course of an operation for goiter. The parathyroid gland sits very close to the thyroid gland in the throat and is responsible for calcium metabolism in the body. As a result of this injury, the patient went into severe convulsions because calcium metabolism had been so altered. The situation was life threatening. Having no time to make a tissue transplantation as he normally would have done, Dr. Niehans simply macerated the parathyroid gland of an ox, added a pinch of salt, and injected this into the pectoral muscle of the patient. Remarkably, over the next few hours, convulsions diminished and then disappeared. The patient, who had been most certainly headed for death, was saved. More astonishing was that complete recovery lasted for over 20 years (Niehans, 1955). This was remarkable. Dr. Niehans had been influenced by the experiments of Dr. Alexis Carrel, begun in 1912, in which Dr. Carrel was able to regenerate older sheep spleen cells when young sheep spleen cells were placed in close proximity. Dr. Carrel reasoned that natural revitalization of cells in young animals, particularly during the fetal stage, was so great that it was often successful in curing and even rejuvenating very sick cells (Niehans, 1955, pg. 7). Over the next 42 years, Dr. Niehans gave more than 45,000 cellular injections, after which he came to the conclusion that "cellular therapy is a method of treating the whole organism on a biological basis, capable of revitalizing the human organism with its trillions of cells by bringing to it those

embryonic or young cells which it needs . . . selective cellular therapy offers new life to the ailing or diseased organism".

Meanwhile, Dr. Niehan's clinic, Clinique La Prairie in Switzerland, became a place visited by the rich and famous for rejuvenation and treatment of serious diseases. Well known people such as Charles DeGaulle, Charlie Chaplain and Winston Churchill visited Clinique La Prairie to have these live cell injections for conditions ranging from memory loss, fatigue and depression to cancer. The majority of the people however came to rejuvenate their bodies. Dr. Niehans conducted a thorough examination, including x-rays, and would not treat anyone who suffered from any infections, including dental problems, tonsillitis or chronic appendicitis because it led to failure of the treatment by cellular therapy. Dr. Niehans noted that the use of drugs such as sedatives weakens or delays or even negates the effects of live cell therapy (Niehans, 1960, pg. 40). He would also not treat anyone until at least 6-8 weeks after a vaccination. He used caution in treating diabetics. He described cellular therapy as "a selective form of treatment which aims at developing underdeveloped organs or organs which are not capable of regenerating themselves" (Niehans, 1969). Live cell therapy became famous for its successful treatment of many difficult disorders. He reported that even seriously ill patients tolerated the treatment remarkably well and that there were no fatalities in his 45,000 treatments (Niehans, 1969).

In the U.S., doctors were also experimenting with oral preparations of tissue extracts (Harrower, 1933, Endocrine Pointers). From the 1920's to 1950's, several groups of doctors in the United States used almost every gland, organ and tissue in live cell therapy with similar success. Some had remarkable success. With this therapy, the patient would be given fresh, freeze-dried, or frozen extracts of the gland or tissue. If it was an endocrine gland the hormones would be all or mostly removed. Live cells would be administered orally or by intramuscular or subcutaneous injection anywhere from once daily to once every three months. Occasionally therapy would continue for one to two years. The end result was often the disappearance of the maladies and no more need for medication or hormones to correct the cellular imbalances.

### **The Resurgence of Live Cell Extracts**

In the United States today, live cell therapy is still being practiced by physicians who are open to alternatives and by those who have seen the dramatic results that can be achieved using live cell tissue extracts. North Americans are much less familiar with live cell therapy than Europeans because today only a small number of physicians here know about it and use it. Until recently, it has also been very difficult to obtain good quality live cell products. In 1994 a limited number of live cell products became available in the United States and Canada. Because they are considered dietary products, no therapeutic claims can be made for them. These products, along with the same tissue extracts now used at several clinics in Switzerland, are more refined and contain only the beneficial aspects of the cells, with cell walls and other debris removed, allowing for a more pure product. Therefore, the names live cell extracts or live cell tissue extracts are more common and more precise terms for the products produced today. If live cell therapy is to become more widely available and accessible to the general public in North America, there will have to be a consumer driven demand for live cell products and for information about their effectiveness. Even though live cell extracts are considered a dietary product, they are only currently available to licensed health professionals including naturopaths, osteopaths, chiropractors, medical doctors and veterinarians.

There has been a huge increase in the number of health care products available, but live cell therapy is the only therapy that can actually regenerate cells and tissues. This is what makes it so

unique. From 1954 to 1993, more than 1,500 experiments involving whole cells, cell extracts and cell fractions were published in scientific journals. For example, Chase and Landsteiner, two of the founding fathers of Cellular Immunology, conducted a number of in vivo animal experiments demonstrating that injections of whole spleen or thymus cells into live animals such as mice or guinea pigs could enhance immunity. By 1933, tens of thousands of physicians in the U.S. had treated many thousands of patients suffering from various ailments with oral or injected live cells (Harrower, 1933) or dried or desiccated glandular tissue in order to restore or regenerate cells and boost function. Substances such as pituitary, pancreas, thyroid, adrenal, ovary and testes extracts were available commercially and used by some of the most eminent physicians. However, the advent of synthetic hormones and their almost immediate and seemingly miraculous effect led to a decline in the availability and the use of these whole gland concentrates (Organo-Therapy, 1994). Now, often encountering the limitations and dangers of using synthetic hormones, some physicians are returning to or experiencing for the first time the benefits of using live cell extracts with their patients. Below are some actual examples of the uses of live cell extract therapy.

### **Some Examples of Live Cell Extract Therapy**

Louise is a 76 year old woman who contracted Hepatitis B from a transfusion a number of years previously. The disease slowly progressed until Louise's physician suggested she be put on the list for a liver transplant due to her impending liver failure. He also wanted to begin giving her very strong corticosteroids. Realizing that a transplant would not be good at her age and not wanting to take corticosteroids, Louise sought the help of an alternative physician. He placed her on frozen thymus extracts, three 7 ml vials per week, taken orally. Gradually her highly elevated liver enzymes and her extreme fatigue decreased. The weight she had lost began to return. Louise continued to have regular blood work to monitor her progress. After approximately 8 months, her serum liver enzyme levels were once again normal, she had regained her lost weight, her fatigue had disappeared and she had suffered no flu, colds or other sicknesses during that time. In a touching letter, she wrote that the doctor had given her back her life.

Live cell extracts can also be administered in the form of an oral spray. One of the advantages of a spray is that it can easily be given to the very young. For example, an 8 month old infant suffering from acute bronchiolitis (inflammation of the smallest air passages in the lung) with a severe cough and abundant nasal discharge was given a thymus extract spray under the tongue, 4 sprays twice daily by her parents. The infant responded rapidly with major changes in the signs and symptoms noticeable within one hour following the first application. Two days later the infant was free of clinical signs of bronchiolitis. The doctor's comments in his records stated "The result was almost miraculous" (Vaillancourt, 2000). This is an interesting case because most applications for live cell extracts involve chronic ailments. In this case the application was for an acute infective condition.

Another more typical example of the use of live cell therapy involves a 58 year old woman who was diagnosed with fibromyalgia. She was unable to walk more than 10 minutes before experiencing dizziness and painful breathing. Breathing was rapid and shallow, accompanied by wheezing. She experienced continual deep-seated fatigue. This woman was also given the live cell extract thymus spray, 4 sprays under the tongue twice per day. After 3 weeks she reported being much more rested and calm. Her breathing had slowed to 13 times per minute, which is normal, with no wheezing, dizziness or respiratory pain. The patient was taking 400 mg. of Ventolin 2 to 4 times daily and Beclovent, 100 mg. 2 to 4 times daily for her asthma. At the end

of three weeks, she felt better when she breathed and did not have tremors or palpitations. She was no longer coughing and was able to sleep better. She was also able to walk for over ½ hour without any respiratory difficulties or dizziness, and was able to walk and talk at the same time, which was impossible before taking the liquid thymus extracts spray. The patient also noticed that since she started taking the live cell extract spray she no longer needed the two medications to help control her asthma. So in addition to the improved signs and symptoms, she was also medication free (Vaillancourt, 2000).

In another case of fibromyalgia, a 35 year old woman was suffering from pains in the legs, knees, lower neck, lower back and shoulders with extreme headaches. The pain was so unrelenting and severe that the woman had attempted suicide on three different occasions. The physician had this woman take 1 vial (7 ml.) sublingually of frozen liquid shark cartilage per day for three months. The dosage was then increased to two 7 ml vials per day. Within 4 weeks of increasing the dose to 2 vials per day, the pain had improved by 80%, her sensitivity to cold, chest tightness and PMS were all disappearing and she was becoming more functional at work. She also noticed huge progress in her emotional stability and her emotional outlook. She did note however, that if she quit taking the liquid shark cartilage, her symptoms tended to return (Vaillancourt, 2000).

One of the distinct advantages of live cell therapy is that it provides the opportunity for flexible, individualized treatment protocols, according to the doctor's understanding of the physiology involved. For example, fibromyalgia is a disease associated with low cortisol levels and altered immune function. It would have been interesting to see how these two patients would have fared if both had been given thymus extracts to normalize their immune function and the adrenal cell extracts to normalize cortisol levels.

People who suffer from a myriad of symptoms cause physicians considerable concern and consternation. As drugs are designed to control specific symptoms or conditions, people with many signs and symptoms are difficult to treat due to the necessity for multiple drugs, which often have multiple interactions. This sometimes results in the patient feeling worse because of the side effects of the medication. Physicians who are used to working with live cell tissue extracts don't usually find this to be a problem. For example, a 39 year old woman presented herself to a doctor's office with pain in the middle of her back that was aggravated by stress and fatigue. She had experienced being chronically tired for several years and had difficulty sleeping. She noted her hands and feet being consistently cold every summer and having a feeling of lightheadedness when she changes positions. She also reported problems with short-term memory. This person had a history of stress since she was young with nearly constant conflicts and fighting. She had been previously diagnosed with mega colon, (extreme and pathological expansion of the colon), and had had chronic constipation with abdominal pains for over 32 years. The patient was started on 1 vial of 7 ml. adrenal cell extracts twice weekly. After six weeks her fatigue and energy had improved, as well as her appearance. On this therapy, she gained approximately five pounds, which she had wanted to gain for a number of years. She no longer had the feeling of lightheadedness when she changed positions. Her sleep had significantly improved. Although she still feels somewhat tired, her energy has increased to nearly normal now. She can do tasks that are physically demanding once again and she is only occasionally cold in her hands. She also now sweats normally with physical effort, which was something she had not done previously. Her memory had improved enough to take University courses (Vaillancourt, 2000).

As can be seen from the examples above, live cell tissue extracts can be used separately or can be combined for specific beneficial effects. For example, a physician in New York City reported a patient having severe hip and back pain. She was scheduled for surgery on her back in hope that it would relieve the pain. X-rays revealed that the cartilage in her right hip had also been totally eroded, leaving painful bone on bone contact at the hip joint. The woman sought the advice of another physician who, after an examination and review of her case, put her on a combination of frozen liquid shark cartilage three times per week and frozen liquid mesenchyme (7 ml) 2 times weekly. Within two weeks the woman reported being pain free and within six weeks a follow-up x-ray revealed regeneration of the lost cartilage in her hip. Since there was no longer any pain in her back, the orthopedic surgeon decided there was no sense in doing surgery, and the woman continued to follow this successful treatment therapy for several months (Benedict, 1995).

In my practice I have seen results using this combination of mesenchyme and shark cartilage in bone and joint injuries that would have been difficult or impossible to obtain with other therapies. One incident involved a patient who was in an auto accident that left her with two herniated discs in her neck. The pain increased and the patient consulted three more orthopedic surgeons, all of whom told her that her herniations were producing deterioration of the discs and that she had no choice but to have surgery and fuse the spine at the sites of the herniations. They also informed her that after the surgery, degeneration of the other joints would continue due to increased stress in those areas as a result of the fusion. Discouraged by their therapy and prognosis, she sought an alternative. After consulting with another physician, she began taking frozen mesenchyme and frozen shark cartilage orally, twice weekly and using a pneumatic traction device for her neck 20 minutes, twice daily, to provide room for the new disc tissue to grow. Four months after she began therapy she was pain free and has been pain free ever since. Recent x-rays of her neck compared to the ones taken after the accident showed increased disc height and healed discs at the areas of former herniation. To regain disc height of a herniated disc is considered outside the realm of medical possibility in these types of cases.

In another case, a professional snowboarder had jumped over a 60 foot cliff, crushing two vertebra in his lower back. The presiding physician told the young man it was doubtful he would ever walk again. His mother, unwilling to take the diagnosis, consulted another physician who recommended taking thymus extract and shark cartilage, similar to the regimen above. Eight weeks after taking thymus extract and shark cartilage, the young man was not only walking but was working actively at light labor, lifting crates. Some months later, the mother returned to ask for advice in healing a knee injury her son had sustained on a recent ski trip. The bad news was that he had torn ligaments in his knee. The good news was that his back had healed so well he was able to ski hard enough to tear the ligaments in his knee.

Live cell therapy is one of the oldest and one of the newest therapies. Its ability to do the seemingly impossible has been documented throughout Europe, Canada, and the United States. The various live cell preparations have no negative interactions with each other, unlike many pharmaceuticals, and side effects are rare. With alternative medicine taking a more prominent position, the use of live tissue cell extracts is consequently experiencing a rapid resurgence in growth. It is expected to be the "go to" therapy as it continues to heal the unhealable and regenerate tissue when regeneration was thought to be impossible. Live cell therapy, however miraculous it may seem at times, is not a miracle. It is simply working with the laws of nature in scientific ways. Although relatively expensive, when the proper live cell extract is used with the

proper protocol, the results are often beyond compare for both physician and patient. It is better and cheaper to do one therapy that works than to go from doctor to doctor, therapy to therapy, without benefit. Because of its uniqueness and versatility, live cell therapy will change more and more lives and become better known and better accepted. The future is bright for the companies that make them, for the doctors who prescribe them, but especially for the patients who receive these tissue extracts.

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