

# CellSonic

## The background

1971 Haeusler and Kiefer reported about the first in-vitro disintegration of a kidney stone with shock waves without direct contact to the stone. 1980 the first patient with a kidney stone was treated in Munich with a prototype machine called Dornier Lithotripter HM1. The shockwave technology was being used in Europe since then.

Early 2000 we realized that the extra corporeal shockwave therapy works well for many medical applications and we decided to work on it. The main aim was to make better performing device at the lowest price. What is needed has to be non-invasive. There must be no side effects. Most importantly, it has to work and to provide the lowest cost of cure. In addition, it has to be well tested, safe and known to all doctors and hospitals. There can be no risk taking on crazy, new ideas. Does this exist? Yes, it is CellSonic.

## CellSonic device

Dr Sanjeev Ghate at Apex started designing and developing a VIPP device in the year 2002. It took us about three years to fully develop the device in-house as expected. The name given to the new machine was CellSonic and the VIPP means very intense pressure pulses. We introduced CellSonic commercially in 2005. When they were exported it was discovered that CellSonic is ahead of anything else in the world. To be allowed to sell in Europe, it is a legal requirement to be CE certified which is a mark of the highest quality and safety.

## VIPP

Very Intense Pressure Pulses (VIPP) therapy is an advanced version of extra corporeal shockwave therapy. The VIPP system has the shorter rise time of a pressure pulse than the conventional shockwave therapy devices. To make the therapy more effective, the rise time of the pressure pulses need to be shortest possible. In other words, shorter the rise time of pressure pulses higher the effectiveness of the therapy. It is now known that CellSonic VIPP device has the shortest rise time of a pressure pulses than any other shockwave therapy devices on the market.

## **What is new about CellSonic VIPP?**

It is cheaper because it is cleverly designed. CellSonic VIPP therapy device is completely designed, developed and manufactured in India. This technique is called electro-hydraulic and creates the most sudden rise in decibels known to science. It is the suddenness and nothing else that is the most important feature of a VIPP therapy.

## **How does CellSonic VIPP work?**

The VIPP causes tissue re-generation by sending stem cells of the right type in the right quantity to exactly the right place. By this means all wounds are healed. There have been cases of curing gangrene. In other words, serious chronic wounds are made acute and the healing then proceeds.

The machine has a hand-held treatment head on a flexible cable. From that head comes a sudden pulse that is directed into the body; the more sudden the pulse, the better the healing. The electronic components required to make the pulse as fast as possible are specially designed and made by Apex.

The list of uses for CellSonic range from curing aches and pains, through wounds to broken bones. To learn how to use the CellSonic VIPP takes five minutes. To know where to aim the pulses takes longer and requires some anatomical knowledge. Experience has shown that a competent nurse can quickly be trained to follow the instructions of a doctor.

We at Apex developed the device to make the applicator hand-held, smaller and at a much lower cost. In the orthopaedics, the first treatments were delivered on broken bones. This led to the discovery that difficult wounds were healed, nerves repaired and infections killed, all non-invasively, drug free and without side effects. Calculations quickly showed that the cost of the cure was lower than by any other method and, in many cases, a cure was only possible with CellSonic.

## **Apex Meditech**