SpineMED

The fact that intervertebral disc injuries and disc degeneration are among the largest contributor to lost time at work is old news.

The fact that there is now an effective non-surgical treatment to address this common condition is today's exciting news.

Decompression Table Technology

Previous conservative modalities have provided only temporary relief to the majority of patients. As a last resort, patients turn to costly and painful surgery to treat their back pain. However, surgery may not provide the long-term solution sought after by patients. Furthermore, a patient must consider the inherent risks of undergoing any surgical procedure.

The well established statistics relevant to back pain depict that 80% of the population will experience severe back pain during their life, and that millions of people live with chronic back pain each day. Excessive loading of the spine through changes in our lifestyle and extended periods of sitting while driving or sitting at a desk cause premature degeneration of intervertebral discs, and repeated injury of the disc annulus.

Spinal Disc Decompression enhances osmotic diffusion, accelera – ting the healing process

With all of this unnatural positioning and loading of the human spine, there is little wonder that severely damaged discs almost never heal. Nutrition in the avascular disc depends on osmotic diffusion of collagen precursors such as proline, nutrients and oxygen. Diffusion of the collagen precursors into the avascular disc pass through direct channels in the annulus (30%) and the hyaline end plate in the vertebrae above and below (70%). It is estimated that the cycle of proline uptake and renewal in the normal disc (necessary for collagen synthesis and repair) takes approximately 500 days. This inherently slow cycle is additionally compromised in the deranged disc. By lowering intradiscal pressures, Spinal Disc Decompression Therapy greatly facilitates this process and accelerates healing in the disc segment.

Accurate and controlled non-surgical decompression of intervertebral discs (decompression, that is unloading due to distraction and positioning) is now possible in an office environment with the SpineMED™ System. Through extensive research, a proven protocol has been developed, which forms the engineering basis for the SpineMED™ System.

The unique design of SpineMed

The efficiency of the SpineMED design reduces typical force requirements.

If you are already familiar with "Decompression Table Technology", then you are undoubtedly aware of the incredible results they can achieve. The SpineMED™ has taken this technology to the next level by developing a unique propriatery design that has been engineered to isolate and distract spinal segments with astounding effectiveness and unsurpassed efficiency. The efficiency of the SpineMED™ design reduces force requirements, which in turn eliminates any untoward discomfort or side effects for the patient. The patented Pelvic Restraints incorporated into the SpineMED™, have made the past requirement for uncomfortable and inefficient pelvic harnesses obsolete. The Pelvic Restraints comfortably secure the patient's pelvis, which reduces the force required to distract the spine, when compared to tables with traditional harnesses. Through accurate tilting of the pelvis during distraction, specific spinal segments can be targeted, for the

Safety mechanisms allow unsupervised treatment

Relaxed treatment offers optimal results

Pelvic support (patent pending)

A medical assistant or technician will only require 4 hours of operator training

precise treatment of identified pathology. This feature eliminates the unnecessary treatment of additional segments, and any resulting side effects.

An infrared heating pad with an effective penetration depth of 3 centimetres has been incorporated into the lumbar section of the table surface, to provide deep heat to para-vertebral tissues during distraction. This warming of tissues provides a more relaxed distraction of the spine and reduces the incidence of muscle spasm. To further improve relaxation during treatment, a CD sound system with wireless headphones has been incorporated into the SpineMED™, to provide the patient with relaxing music throughout the therapy session.

Once a treatment session has been initiated, the SpineMED™ operator can leave the patient unattended, as the patient has complete control of the treatment in progress. Through the primary hand held electrical patient safety switch, or the secondary mechanical safety release system, the patient can halt the application of force at anytime. This unsupervised treatment allows the device to be placed in a quiet and darkened area to promote relaxation and often sleep for the patient.

The entire device has been designed with tomorrow's technology in mind. An integral rack-mounted server controls the entire operation of the SpineMED™. This integrated computer facilitates levels of control and functionality unseen in previous technology. A 15-inch colour monitor with touch screen technology provides the operator with a simplistic interface to the comprehensive control system (the proprietary SpineMED™ software system).

The level of computerization is extensive, as the SpineMED™ automatically controls most aspects of the treatment parameters through integrated formulas and calculations based on individual patient data and a proven protocol. To reduce the incidence of human error, the operator is prompted with default values for any treatment parameter that must be entered. Due to the uncomplicated operation of the SpineMED™ , a Medical Assistant or Technician will only require 4 hours of operator training to be proficient in the use of the device.

Secure access provides the practitioner or clinic management with ultimate control over the use of the SpineMED™ unit, eliminating any unauthorized or unskilled use of the device. Access to the device is limited to operators with a valid User ID and Password, which can only be added or modified by the manager of the device.

Designed with tomorrow's technology in mind.

Features

- Simple, touch-screen operator menus ensure ease of operation while employing extensive device control.
- Quick and simple patient set-up reduces staff requirements and improves patient turn-around.
- Can be operated by a trained technician or Medical Assistant
- Engineered to fit into compact offices and for mobility.
- Computer generated medical reports at the touch of a "digital button"
- Built with the highest quality materials and medical grade components to ensu
- Upgradeable: The SpineMED™ is primarily software driven, allowing for enhanc which can be simply downloaded to your unit via modem line. Your SpineMED

Automatic control of most aspects of the treatment

Every aspect of the SpineMED™ unit will not only be controlled, but will be known by the manager of the device through the integrated database. Prior to any patient being treated on the SpineMED™, a new permanent file must be created in the device database for the patient. The software requires complete entry of all patient data fields, which include: extensive personal identification, known pathology related to the treatment, history of condition and previous alternate treatment. An individual patient must be selected in the database to initiate a treatment session. The device uses data stored in the patient's file such as body weight to tailor the treatment to the specific patient. With the exception of the angle of distraction, every parameter of the treatment is calculated by the SpineMED™ software©.

Memorized treatment values

After the first treatment session, the device memorizes the previous treatment values for each patient and prompts the operator to use the previous values. The operator of the device has the ability to override the Maximum Tension prompted by the system to ensure that each patient receives

re years of trouble-free use.

cements and improvements to the technology,
D™ won't become obsolete next year, when improvements are introduced.

treatment tailored to the SpineMED™ protocol as defined in the Operator's Manual. Based on a standardized 0-5 Visual-Analog scale, the patient's daily Pain and Disability scores as well as symptom comments are collected and permanently attached to the treatment record to track efficacy. A digital trend-line graph of the force/time values of the treatment are displayed in real time on the system monitor, which can also be printed in hard copy to supplement the patient's chart. Every treatment administered on the SpineMED™ becomes a permanent record in the device and is stored in the patient's file. This permanent record includes all of the parameters of the individual treatment. (ie. date, time, tensions, duration, operator ID, trend line graph, etc.)

Saves practitioner's time

Time is one of the most valuable assets to a Medical Practitioner. Unfortunately, practitioners are bogged down with the time consuming task of filling out progress reports as opposed to practicing their respective professions. The SpineMED™ makes manual progress reports a hindrance of the past. At the touch of a digital "button", the SpineMED™ produces the following comprehensive patient reports through the incorporated laser printer:

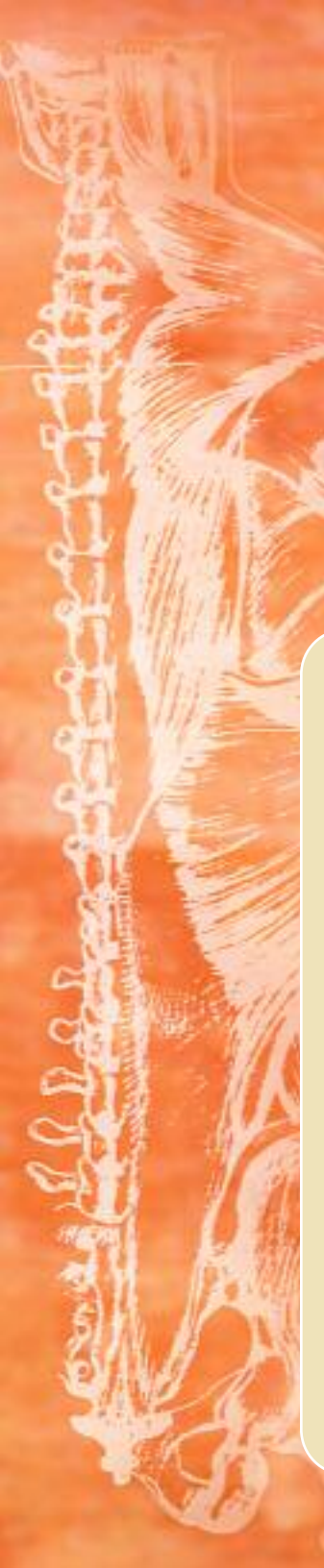
1) A Daily Treatment Report, which includes all of the specific parameters of the treatment, such as all patient information, pathology, date, time, force parameters, pain and disability scores, and a digital graph of the treatment; and

2) A Daily Progress Report, which is a compiled report of EVERY treatment administered to the patient, including all patient information, pathology, date, time, force parameters, pain and disability scores, and daily comments. These reports are customized to the SpineMED™ practitioner, as a "Letterhead" with the clinic or practitioner's name and address. With these reports automatically generated, a practitioner can focus his or her time on treating patients as opposed to filling out paperwork.

The high caliber engineering employed in the development of the SpineMED™ carries through to its durability, low maintenance, and ease of application. In the event of a power failure, an integrated battery-backup system provides adequate power to operate the entire system for a full 30 minutes, and safely complete the treatment in progress. The SpineMED™ is designed to be completely maintenance-free with the exception of laser printer consumables. If necessary, system diagnosis and software upgrades for your SpineMED™ can be administered remotely by CERT Health Sciences, LLC by simply connecting the device to a telephone or fax line.

Treatment is possible in an office environment

Do you have limited office space, or planning to relocate in the future? The SpineMED™ was designed with portability and space limitations in mind. The device fits comfortably into an 8' x 8' room, and can be squeezed into a 6' x 8' space if necessary. You won't need to hire six men and a factory technician to move your SpineMED™, as both the Console and the Table have incorporated caster assemblies to allow easy mobility.



Ultimate pre-surgical modality

For surgeons, the SpineMED™ treatment program is the ultimate pre-surgical conservative modality to prescribe - to your own office. In the past, surgeons were forced to refer out their patients for preliminary conservative treatment, such as physical therapy or chiropractic treatment. With the extent of device control and superior efficacy, the SpineMED™ now enables the surgeon to keep the patient in-house for conservative therapy, without losing the most valuable asset a physician has... TIME. The SpineMED™ can be operated by a trained technician or Medical Assistant, which limits the physician's time involvement to the patient's initial suitability evaluation and exiting examination.

Safety

- The patient is in complete control of the treatment session at all times;
  - The hand held patient electrical safety switch, when depressed, will immediately discontinue the session. The switch is tested prior to each session, and the SpineMED™ will not function if the switch is damaged or disconnected.
  - The secondary mechanical release is a manual release that disengages the upper restraint by simply pulling a lever on the side of the table.
- The SpineMED™ has an alarm system to notify the operator in the event the patient has depressed the patient safety switch.
- The SpineMED™ will operate for a full 30 minutes in the event of a power failure with the battery backup system, to ensure uninterrupted treatment sessions.
- The electronic monitoring system incorporated into the SpineMED™ monitors and adjusts the tensions being delivered to the patient every 20 milliseconds, which ensures a constant tension level, even during patient movement.
- The SpineMED™ is engineered and certified to worldwide medical standards:
  UL 2601-1; CSA C22.2, No. 601-1; and EN 60601-1-2

Financing or lease packages
are available to qualified healthcare practitioners o.a.c.

To order your SpineMED™ System,
call CERT Health Sciences today, at 1-866-990-4444.

CERT Health Sciences, LLC

www.spinemedtherapy.com