

ENHANCED OUTCOME WITH INTRAPERITONEAL HYPERTHERMIA

ThermoChem HT System

BREAKTHROUGH TECHNOLOGY IN INTRAPERITONEAL HYPERTHERMIA

 ThermaSolutions
ThermoChem
HT-2000



HT-2000: The successor of the First Fully integrated System for Intraperitoneal Hyperthermia

The ThermoChem™ HT-2000 System of ThermaSolutions, is the successor of the first fully integrated system specifically designed and manufactured for intraperitoneal hyperthermia (IPH), originally launched in 1999 by our division ViaCirq. By exploiting heat and harnessing its power, this advanced medical technology offers a new choice in adjunctive surgical therapies. Used intraoperatively, the ThermoChem™ HT-2000 System raises the temperature in the peritoneal cavity by continuously circulating sterile solution throughout the peritoneal cavity.

System Operations

The ThermoChem™ HT-2000 continually circulates a heated sterile solution throughout the abdomen, accurately raising its temperature to a pre-determined target selected by the physician.

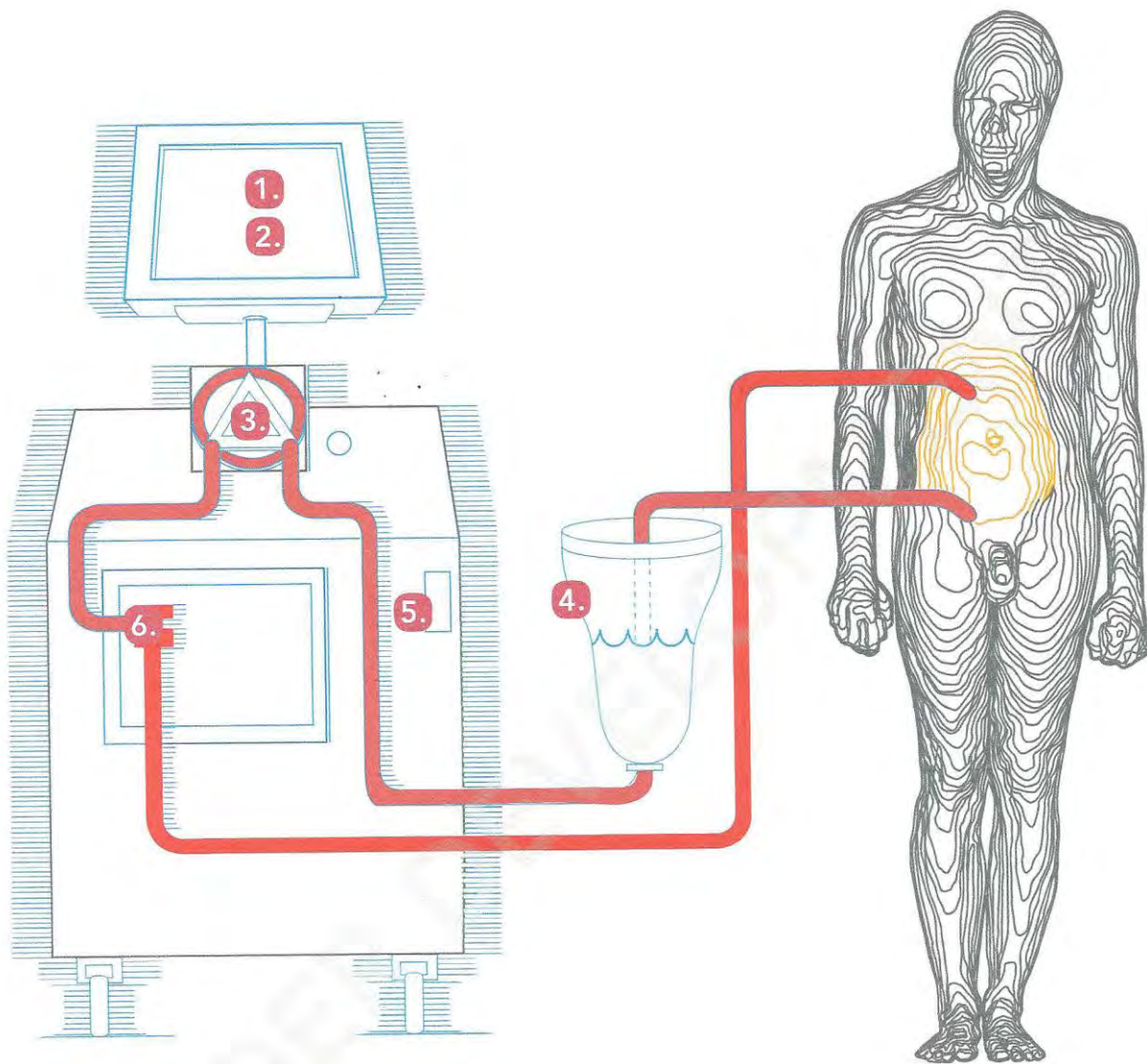
The ThermoChem™ HT System

The ThermoChem™ HT-2000 System includes two major components:

- The ThermoChem™ HT-2000 operating unit;
- The ThermoChem™ HT-2000 disposable IPH procedure kit.

The ThermoChem™ HT-2000

Providing a new standard in intraperitoneal hyperthermia treatment, the ThermoChem™ HT-2000 is a system of specially integrated subsystems and devices for fluid control and accurate temperature maintenance. At its core is a heater system that was specifically developed for intraperitoneal heating, and is adjustable from 36 to 47°C in 0.1 degree increments. With this level of precision, the targeted treatment temperature can be quickly achieved, closely maintained, and easily adjusted to optimize treatment efficacy and patient safety. In addition, a temperature monitoring system serves as an added safeguard in preventing any possible 'over-temp' condition. Fluid flow is controlled by a roller pump system with a flow rate range of 0 to 2400 ml/min. All operating parameters are monitored by a computer, and displayed and managed through an interactive touchscreen monitor. Added to this, we have pressure sensing software on the ThermoChem™ HT-2000, with a feedback loop to the machine. The operator can access all system controls and operations, input all necessary patient data, and define and adjust treatment parameters with just the touch of a finger.



1.

Touchscreen Monitor. Prompting the user from initial system set-up through complete operation, the touchscreen monitor displays critical treatment parameters and provides fast and easy access to all controls and operations.

2.

Temperature and Pressure Monitoring System. Proprietary safety system monitors patient and device operating temperatures and pressure, for patient safety, and maximizes treatment effectiveness.

3.

Roller pump. Fluid travels from the fluid reservoir through a roller pump, and a heat exchanger. The pump ensures accurate flow rates from 0 to 2400 ml/min, and provides steady flow for optimum fluid perfusion and dispersion.

4.

Fluid reservoir. Via return drains, fluid flows into a reservoir where it is filtered before returning to the patient. Additional fluids can be added through the reservoir as desired.

5.

Temperature probes. Patient temperatures may be monitored at up to four locations to document and ensure uniform heating for optimal treatment results and patient safety.

6.

Heat Exchanger. High-efficiency heat exchanger ensures consistent regulation of temperature and rapid response to any necessary adjustments. After flowing through the heat exchanger, fluid is delivered to the peritoneal cavity via inflow catheters.



ThermoChem™ HT-2000 IPH Procedure Kit

Accessories necessary for an IPH treatment are in ready-to-use sterile packaging, including fluid reservoir, high-flow heat exchanger, patient temperature probes, PVC pump tubing set, inflow catheters, return drains and pressure sensor.



