

**Cryolesion** is a therapeutic method basing on temporary interruption of neural and motor functions of selected structures of the nervous system by application of cold. Cryolesion is gaining more acceptance as an innovative method in pain relief. It uses the process of analgesia, during which the ice crystals created by the cryo-surgery device destroys the elements of the nerve tissue carrying pain information. Cryoablation does not damage nerve structures permanently that is why nerve tissues can regenerate slowly with no risk of post-procedural neuritis. The procedure is safe and minimally invasive, recommended especially when traditional means have been ineffective.

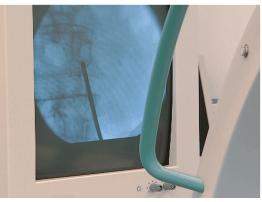
#### Application:

- Acute postoperative pain from thoracotomy
- Facial pain syndromes (tic doulourex)
- Occipital, suprascapular, ilio-inguinal and other specific neuralgias
- Facet syndrome cervical, thoracic and lumbosacral
- Coccydynia
   Perineal neuropathies
- Phantom Limb
- Trigger points
- Painful neuromas
- Tennis elbow syndrome and golfer's elbow syndrome
- Painful shoulder syndrome
- Carpal tunnel syndrome

"It is particulary useful when other modalities of pain relief are unacceptable to patients such as surgery or device implantation, too difficult to perform, have a high incidence of complications or side effects, or has been ineffective."

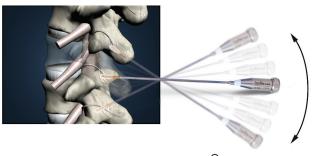
(Orlando G. Florete M.D. Baptist Institute of Pain Management)





### The advantages of cryolesion in pain management using Cryo-S Electric PAINLESS®

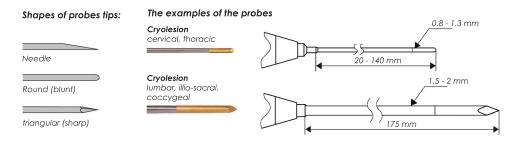
- Out patient procedure, reversible
- High efficiency: pain reduction for 6 months to 2 years
- Simple diagnosis: fluoroscopy or echography
- Subcutaneous procedure, microinvasive under local anesthesia
- Fast return to normal activity no hospitalization
- Procedure can be repeated
- Painless
- Low cost of procedure
- Whole range of reusable contact probes of various shapes and sizes



Contact probe for Cryo-S Electric PAINLESS <sup>®</sup> The cryolesion can be performed on several levels through one incision.

### Contact probes for Cryo-S Electric PAINLESS®

All of the cryoprobes are reusable, easy to sterilize and easy to use. The special construction enables precise freezing and fast defrosting. The tip of a probe inserted subcutaneously is sharp. These one of cryoprobes that aim to stick to the nerve more closely are rounded. This type of probe is inserted through a mandrel.



## Cryo-S Electric PAINLESS®

State of the art cryosurgical device manufactured by Metrum CryoFlex is the next generation of apparatus used by many experts in the field from 1992.

**Cryo-S Electric PAINLESS** is controlled by microprocessor, and all the parameters can be monitored on a special LCD screen.

- Mode selection, cleaning the probe and freezing can be performed using foot switch which is also helpful for keeping the site of a lesion under sterile conditions.
- Contains automatic probe cleaning system and two freezing modes (continuous and discontinuous)
- Temperature of the probe, pressure, gas flow, time of the procedure are displayed during freezing.
- It can be used in other medical specializations such as gynecology, dermatology, laryngology, ophthalmology, phlebology



Cryo S electric PAINLESS®

The working medium for **Cryo-S series** devices is  $N_2O$  - nitrous suboxide (-89°C). It is the anaesthesiological gas, very efficient and easy to use. One 10 liters cylinder of  $N_2O$  serves for 4 hours of continuous work. Due to special qualities of the gas it can be stored safely in cylinders made of steel and without losses, which is one of the greatest drawbacks of liquid nitrogen devices. The apparatus can also work on carbon dioxide  $CO_2$ .

# **■ Metrum** CryoFlex

**Metrum Cryoflex** is a world recognized manufacturer of cryosurgery and cryotherapy devices, medical lasers and ozone generators. Extended research backup guarantees constant development and improvement of our products but also quick service.

Medical apparatuses from **Metrum Cryoflex** are world acknowledged devices. The process of production is maintained according to the highest standards which are certified by the **Quality Management System Certificates (EN ISO 13485:2003)** and **CE 0044**.

We offer training and free equipment testing.

1992 - 2012

Twentieth anniversory
of the company Metrum CryoFlex
Thank you
for your cooperation and trust

Wiestaw Brojek President of Metrum CryoFlex material prepared in cooperation with:



Breite Straβe 47 / 13187 Berlin Heubnerweg 2 / 14059 Berlin



Medical Devices Manufacturer all devices are manufactured in accordance with quality management system ISO 13485:2003

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