

# EFFECTIVE TUMOUR MANAGEMENT

## IN CUTANEOUS & SUBCUTANEOUS CANCER TUMOURS



### WHAT IS ELECTRO-CHEMOTHERAPY?

Electro-chemotherapy is a combination of high voltage short duration electric impulses and low-dose chemotherapy. Application of electro-chemotherapy transiently changes the cell-membrane permeability of cancer tumour cells. Changed permeability results in high-uptake of chemotherapeutic drugs. It delivers good tumour regression, tumour pain management and bleeding and secretions control. It's a short duration safe treatment with no/ negligible side-effects.

**PERMEOS FOR DIFFICULT TUMOURS:  
WHEN UNRESECTABLE TUMOURS  
& TUMORS WITH FUNGATING MASS  
DON'T RESPOND TO CHEMOTHERAPY**

### PERMEOS ELECTRO-CHEMOTHERAPY

PERMEOS electro-chemotherapy is a tumour treatment system used for cutaneous & sub-cutaneous cancer tumours of any histology. PERMEOS is designed for Indian conditions and has local technical support. It is recommended in neo-adjuvant, adjuvant and palliative treatment of tumours and for management of 'difficult tumours'. It can often deliver tumour healing even when other treatment modalities fail.

#### Neo-adjuvant

PERMEOS electro-chemotherapy can be used prior to a tumour surgery to reduce tumour size. Reduced tumour size may allow tumour resection of earlier unresectable tumours. It can also be used to reduce tumour size prior to chemotherapy/ radiotherapy.

#### Adjuvant

It can be used along with chemotherapy and radiotherapy to achieve better tumour specific results.

#### Palliative

Permeos electro-chemotherapy is indicated for use in palliative care for tumour regression, tumour pain relief and for controlling tumour bleeding and secretions.

#### Difficult tumours

Tumours which cannot be resected surgically due to their size, position or recurrence and tumours which are not responding to regular chemotherapy and radiotherapy, can be treated by electro-chemotherapy.

# TREATMENT HIGHLIGHTS

## QUICK PROCEDURE

Electro-chemotherapy is a short procedure. It takes around 20 to 30 minutes. It is more often performed under local anaesthesia in the minor OT. The patient can be discharged in a few hours.

## NO MAJOR SIDE-EFFECTS

As the chemotherapeutic drug dose is very small, the procedure has no major side-effects. Bleomycin and Cisplatin are the recommended drugs for electro-chemotherapy.

## FAST ACTION

Results are seen within the first 48 hours. It can take up to 4 weeks to see substantial tumour regression. The treatment can be repeated multiple times.

## TREATMENT IMPACT

### Total/ Partial Tumour Regression

Can be achieved in single/ multiple sessions.

### Pain Control

Effectively reduces excruciating tumour pain.

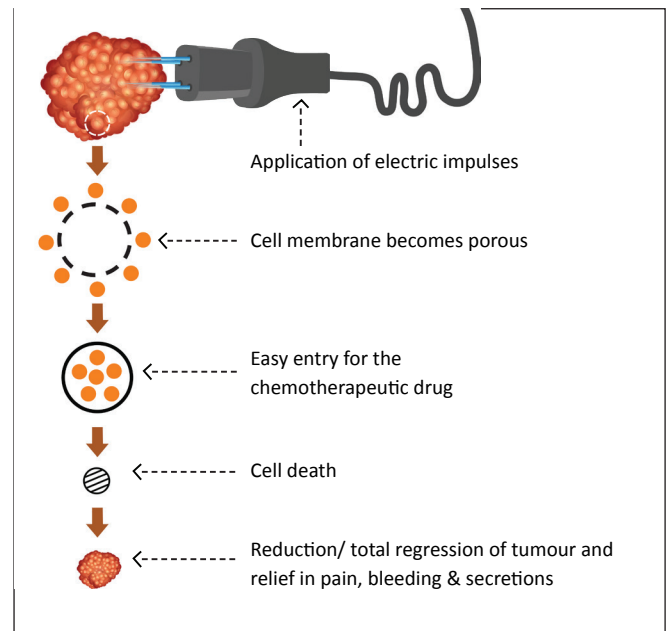
### Bleeding and Secretions Control

This improves quality of life.

## TYPES OF TUMOURS TREATED

- Head & Neck Squamous Cell Carcinoma
- Malignant Melanoma
- Basal Cell Carcinoma
- Adenocarcinoma of Breast and Salivary Gland
- Hypernephroma
- Kaposi Sarcoma

# HOW IT WORKS



# DEVICE HIGHLIGHTS

- ✓ Designed for Indian conditions.
- ✓ Portable and sturdy system.
- ✓ User friendly operations.
- ✓ Integrated intelligent indicators management system.
- ✓ Structured and unstructured data collection and data back-up facility.
- ✓ Integrated camera with image storage.
- ✓ System generated printed report.
- ✓ Local technical support and maintenance.
- ✓ On-site training facility for device operations.

## SPECIAL SAFETY FEATURES

- ✓ Every device tested separately and certified by ISO certified government accredited laboratory.
- ✓ Phase reversal protection mechanism integrated with the system.
- ✓ Emergency switch off and data protection.
- ✓ Integrated current and voltage control mechanism.