

ULTRASOUND

This is high frequency sound wave machine (0.75-3.0 MH). The high frequency current is transmitted to the crystal in the sound head to produce a mechanical vibration.

EFFECTS

micromassage - the alternate compression and relaxation of tissue by the pressure of the sound waves

thermal reactions - friction caused by the ultrasound produces heat and thus increase circulation

circulation - vasodilation , acceleration of lymphatic flow

INDICATIONS

Adhesions, pain and muscle spasms, inflammation, swelling

CONTRAINDICATIONS

Tumors, DVT, infections, over metal implants

INTERFERENTIAL CURRENT

This uses two medium frequency currents around 4000 Hz to produce current between 1 and 100Hz. When the two currents are simultaneously applied to the tissues, a vibration is generated where the currents cross.

EFFECTS

The currents causing oscillations produce vibrations on the sensory nerve endings and generate an analgesic effect.

The fine vibrations further facilitates the ion movement in the cellular level. The alteration in permeability of the cells would aid in the removing edema and facilitates the healing process.

INDICATIONS

Pain, muscle spasm, edema, hematoma,

CONTRAINDICATIONS

Arterial disease, DVT, infection, tumors, pacemakers, open wounds

PRONEX

This is a mechanical device used to produce cervical neck traction without the application of pressure to the TMJ area.

Traction is indicated in nerve root entrapment, cervical disc herniation or bulging and general relaxation of the neck muscles.

Contraindications include ligamentous instability, tumors, cerebro-vascular insufficiency, RA,