

Vesalius[®]

MCN PLUS

NEUROSURGERY, SPINE SURGERY & MORE

Vesalius MCN PLUS is state of the art mono and bipolar device, purposely developed for a wide type of operations. It finds its best application in procedures of Neurosurgery, Skull base and Spine Surgery.



Vesalius MCN plus is based on the **Quantum Molecular Resonance Technology** which creates high frequency fields combined in such a way to minimize the transfer of energy into a thermal form. The quantized high frequency spectrum (4MHz with harmonics) generates quanta of energy with a sufficient value to break up the molecular bonds without increasing the kinetic energy, inducing only a modest temperature increase.

CHARACTERISTICS

The CUT function, by using the QMR technology, induces breakage of molecular bonds while the temperature of the tissues barely increases. As a consequence, this function produces a precise cold cutting and causes a low lateral heat, producing a minimal destruction of the tissue that surrounds the operation area, allowing an extremely delicate incision.

Activating the COAGULATION function, the MCN plus produces waveforms off-resonance in such a way as to only raise slightly the temperature. As a consequence, instead of collapsing the vessels and necrotizing the area as the standard electro/radiosurgical units do, the effect of coagulation is obtained by triggering the denaturation process of the fibrinogen to form fibrin. The temperature of the target tissue increases more than when using the CUT function, but still remaining at modest level.

ADVANTAGES:

- Reduced necrotic tissue and thermal damage ⁽²⁾
- Precise, undamaged histological examinations
- Less post operative pain ⁽¹⁾
- Reduced duration of surgery ⁽⁵⁾
- No irrigation required

ADVANTAGES FOR NEURO & SPINE SURGERY:

- Cut and coagulation occur with modest temperatures ^(2,3,4)
- Safe ⁽²⁾
- Bipolar and monopolar output
- Wide range of disposable electrodes
- Single use and re-usable non-stick Bipolar forceps
- Concurrent coagulation and tissue dissection ⁽⁵⁾

TECHNICAL FEATURES:

Quatized high frequency spectrum for Monopolar and Bipolar output functions

Two microprocessors checking the system and the safety circuits

Auto-test at every start

Device provided of high insulation (floating) Class 1 type CF

In respect of the Directives 93/42/EEC and s.a.a. (2007/47/EC) (CE0051)

In respect of International Standards IEC EN 60601-1(III edition); 60601-1-2; 60601-2-2

Max power CUT

MONO 120W/300Ω
BIPO 120W/100Ω

Max power BLEND

MONO 120W/400Ω
BIPO 130W/100Ω

Max power COAG

MONO 100W/300Ω
BIPO 70W/100Ω

REV. 120914

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Find out more!



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