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INSTRUMENTS, HAN
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W. J. Harper
HSE

NEUROSTIM LA

265.00 + VAT

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The NEUROSTIM LA is a peripheral nerve stimulator for use in nerve block therapy and nerve block anaesthesia, using techniques developed by Prof. P.P. Raj. The nerve to be anaesthetised for the purpose of peripheral nerve block can be located with extreme accuracy by means of an electrically isolated hollow needle.

Method:

The injection site is prepared in the normal way, with local anaesthetic if wished. A hollow needle is inserted through the skin to the presumed site of the nerve and connected to the red output socket of the NEUROSTIM LA by means of the electrode lead supplied. The reference electrode is a normal adhesive ECG electrode, which is placed on the opposite side of the body from the injection site, and connected to the black output socket of the instrument.

When the tip of the needle reaches the epineurium, a direct stimulation impulse can be sent from the NEUROSTIM LA to the nerve. The reflex of the innervated muscle sets up vibrations in the needle.

By observing the motor impulses elicited, the operator can correct the position of the needle and locate the nerve precisely. A test dose of about 2 ml of the local anaesthetic is administered through the canula to confirm the position of the needle: the motor response should cease after about 10 seconds. This gives the all-clear for the full anaesthetic dose.

Regular non-isolated canulas or isolated canulas such as Vygon Electrostimulation needles can be used.

Technical description:

The NEUROSTIM LA has a compact, heavy-duty plastic casing and is designed to be held and operated with one hand.

Nerve function is monitored via a fixed stimulus frequency of 1 Hz, with a duration of 1 msec and easily varied amplitudes of 0-10 mA (constant current), as marked on the circular scale. Constant current stimulation is desirable in order that variations in electrode impedance do not affect the stimulus amplitude. The maximum voltage delivered is 15 V, so that the maximum current setting of 10 mA is still passed by a maximum electrode impedance of 1.5 kOhms.

The instrument operates on a single dry cell battery. An indicator lamp synchronised with the current to the patient shows when the instrument is supplying current. The brightness of the lamp varies with the amplitude. The lamp fails to illuminate if the output is not connected or there is a lead fault. The NEUROSTIM LA also incorporates an audible click indicator synchronised with the stimulus impulse. This also reminds the user to switch the instrument off after use. There is a battery check facility in the form of a button, which, when pressed, illuminates a light if the battery energy is adequate.

The NEUROSTIM LA can be disinfected with a regular disinfectant spray such as BACILLOFORM (Dr. Bode & Co.). It is recommended that 2 patient leads be ordered for each instrument, so that a freshly sterilised lead will always be available.

Comments : 1 msec pulse width to long (200 µsec) replica on trial in Hospital.

SPECIFICATIONS:

stimulus frequency 1 Hz
stimulus pulse width: 1 msec
stimulus pulse amplitude: adjustable, 0–10 mA
constant current
max. stimulation voltage: 15 V
power: 1 Mallory TR 118 dry cell
battery
battery life: 500 hrs operation
size: 50 x 110 x 35 mm
weight with battery: 200 g

REFERENCES:

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- Burnham P.J.: Regional block of the great nerves of the upper arm. *Anesthesiology* 19: 281–284, 1958
- DeJong, R.H.: Axillary block of the brachial plexus. *Anesthesiology* 22: 215–225, 1961
- Winnie, A.P., Collins, V.J.: The subclavian perivascular technique of brachial plexus anesthesia. *Anesthesiology* 25: 353–363, 1964
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- Raj, P.P., Montgomery, S.J., Nettles, D., et al.: Infraclavicular brachial plexus block: a new approach. *Anesth Analg.* 52: 897–904, 1973
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PRICE:

1 unit NEUROSTIM LA

stimulator for peripheral nerve block during anaesthesia, battery-powered, with strap, batteries inserted, electrode leads 1.5 m for connection of teflon coated electro needle
– 2 extension cables with crocodile clamp, 0.3 m (can be sterilized) for connection to plain canula
– 3 disposable electrodes

DM

Spare parts and needles for NEUROSTIM LA:

replacement electrode cable 1.5 m DM
extension cable with crocodile clamp 0.3 m, can be sterilized; packed in lots of 5 DM
disposable electrode with clip mount; lot of 30 pieces DM 27,–
(spare battery MALLORY TR 118 = DM 35,–)

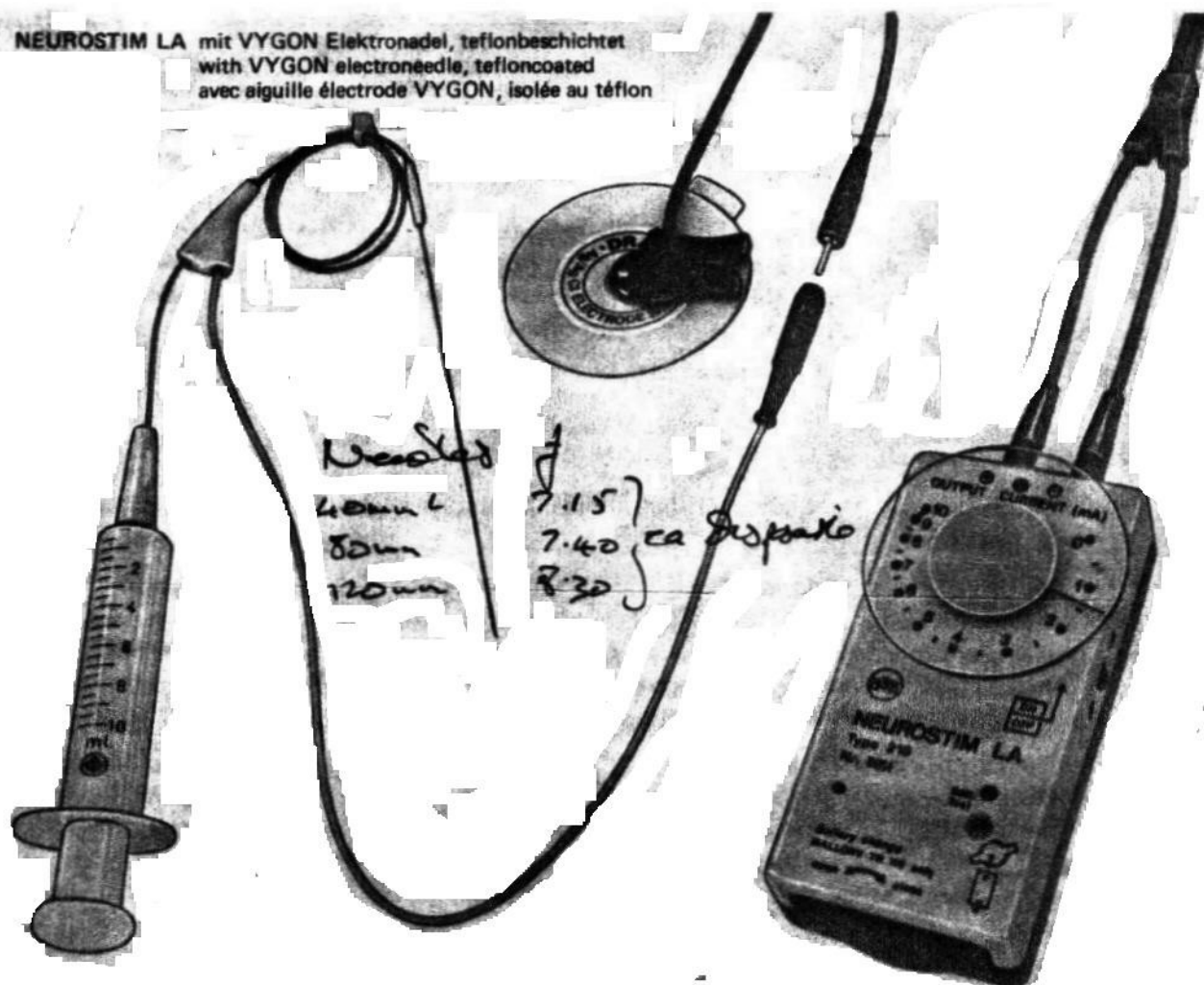
V Y G O N

disposable electro needles canula = 0.5 mm ø	prices per piece in lots of	
	1–99 pieces	100 and more
length 40 mm	20,50	19,50
length 80 mm	21,40	20,25
length 120 mm	24,50	23,00

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– subject to modification without notice –

NEUROSTIM LA mit VYGON Elektronadel, teflonbeschichtet
with VYGON electroneedle, tefloncoated
avec aiguille électrode VYGON, isolée au téflon



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