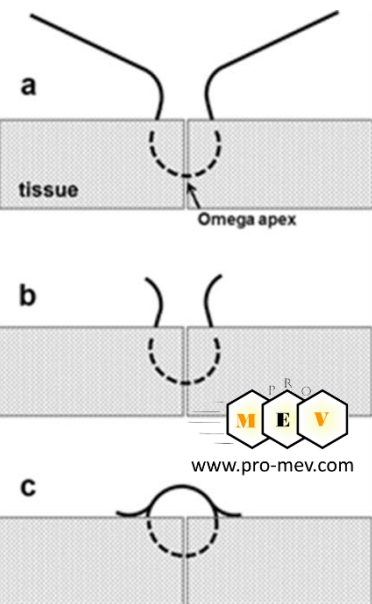


SELF KNOTTING SUTURE

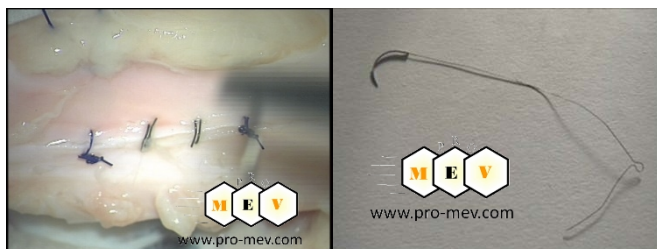
A new design of shape memory alloy NiTi ring for suturing in deep surgical field: the self-knotting suture.

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we present a new simple interrupted stitch, made of NiTi shape memory alloy (SMA) wire, able to regain a predetermined ring shape, when heated.



omega shaped part of the NiTi suture wire before (left) and after (right) heating above



- our proposal is a wire and not a clip.
- our proposal is based on shape memory
- the process of "closure" is gradual and controlled by the physician, by adjusting the irrigation of the hot water (38 C°)

advantages

- no adhesion (NiTi wire shows a near-smooth surface)
- no time needed for knot tying (time saving)
- simple,easy of use while only irrigation is needed (38 C°)
- biocompatibility (good corrosion properties, negligible release of Ni ions)

In short, the availability of all types of measures and diameters for microvascular anastomosis