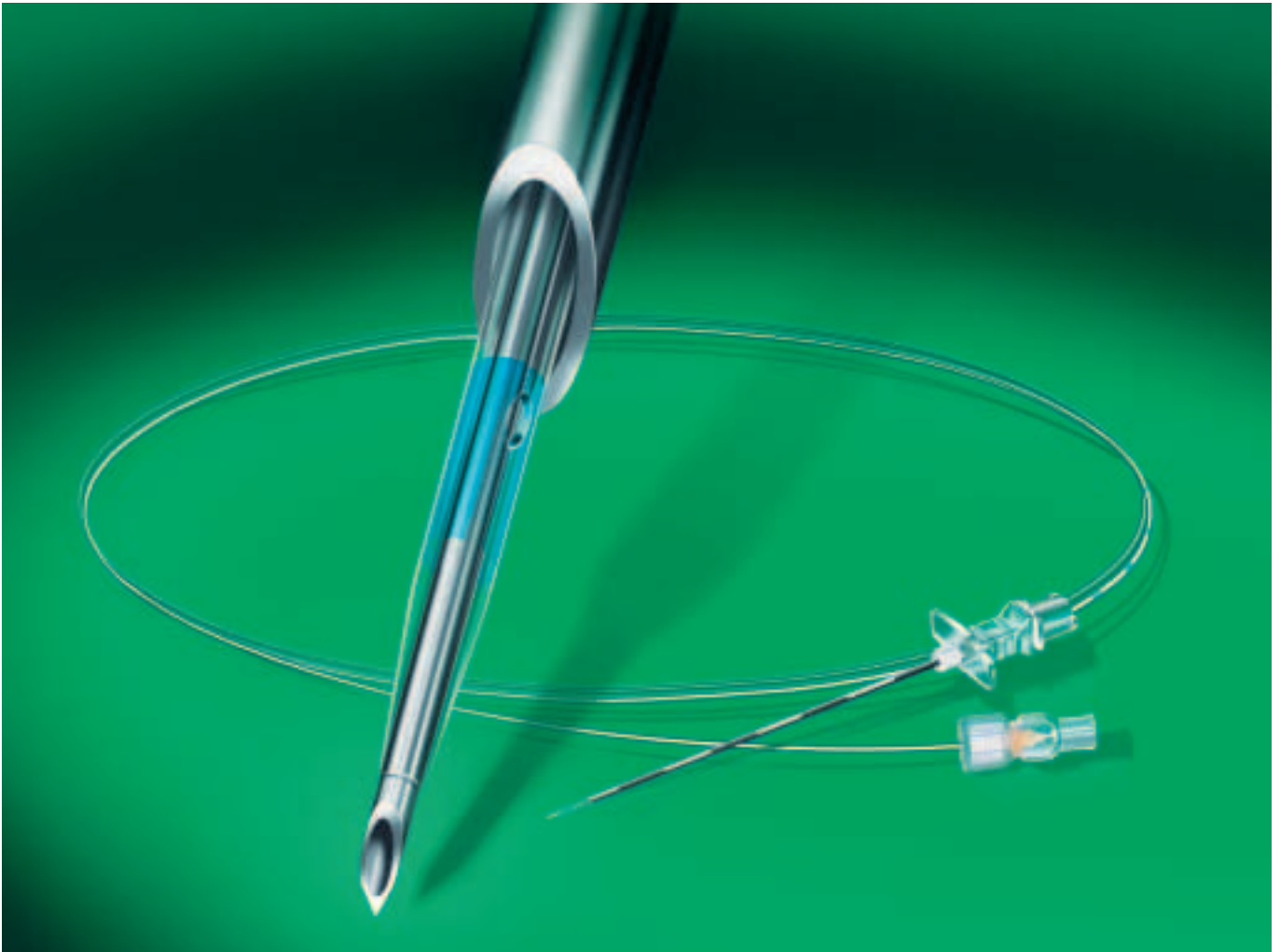


Spinocath

The new vision in CSA



The breakthrough "over the needle" design

B | BRAUN

Spinocath

Opens a new horizon for CSA

Benefits of Continuous Spinal Anaesthesia (CSA):

- rapid onset
- titration to desired level of anaesthesia with a minimum amount of anaesthetic
- minimal circulatory/respiratory impairment
- duration of anaesthesia can be extended
- short recovery period
- postoperative pain management

Advantages of CSA over Single Shot Spinal:

- top ups to extend and control duration of the block
- better control of the level of anaesthesia
- less risk of circulatory/respiratory depression
- anaesthetic can be given with patient in operative position
- shorter recovery period

Advantages of CSA over Continuous Epidural:

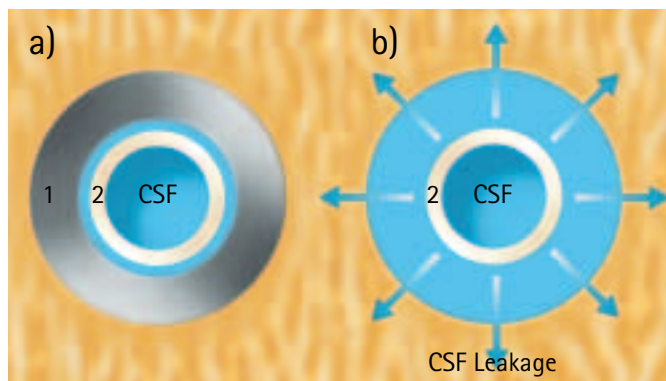
- positive preoperative confirmation of intrathecal catheter position
- faster onset
- more reliable block
- 10–15 times less anaesthetic reduces risk of systemic toxic reactions
- shorter recovery period, "walking epidural" (like CSE)

Advantages of CSA over Combined Spinal Epidural (CSE):

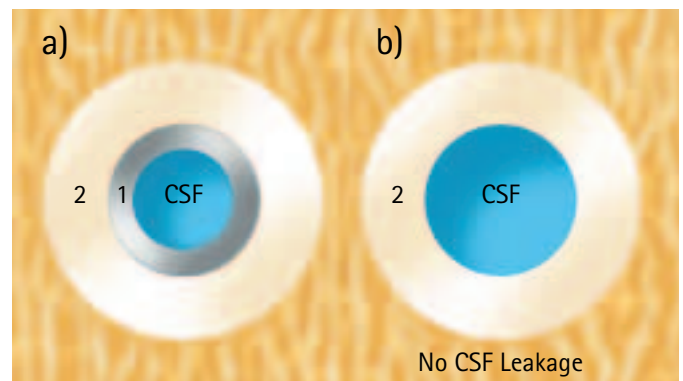
- positive preoperative confirmation of intrathecal catheter position
- straight forward "all in one" technique
- better reproducibility through spinal top ups
- continuous control through fast acting spinal top ups

Indications for CSA:

- "For patients in whom spinal anaesthesia is indicated and when the duration of surgery is anticipated to exceed 2–3 hours." (4)
- The advantage of titration allows the inclusion of haemodynamically unstable patients
- Types of surgery found in the literature include:
 - peripheral vascular surgery
 - orthopaedic procedures
 - genitourinary procedures
 - gynaecologic surgery
- Additional indications may include:
 - emergency cases
 - pain therapy
 - obstetrics



Conventional microcatheter or other catheter through needle system: **Catheter is smaller** than dural opening, considerable CSF leakage after removal of the puncture needle is to be expected

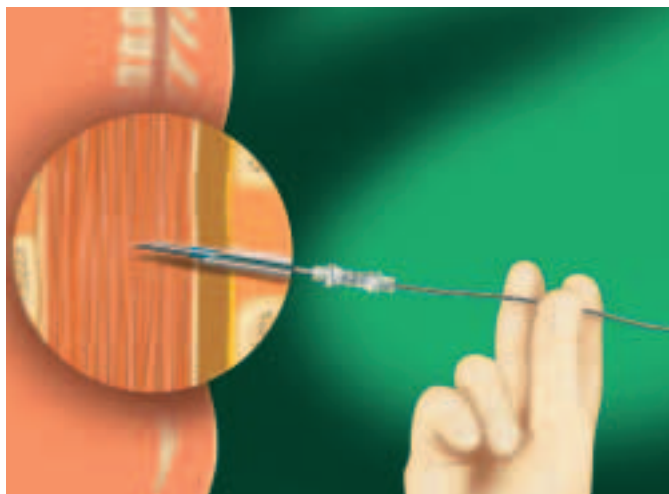


Spinocath system: **Catheter is larger** than spinal needle thus dilates and seals the dural opening

- a) Situation upon dural puncture
- b) Situation after removal of needle
- 1 = spinal needle, 2 = spinal catheter

Spinocath for the best anaesthesia/analgesia

The safe, succesful and simple CSA-System



Insertion of the spinal catheter/needle system into the intrathecal space

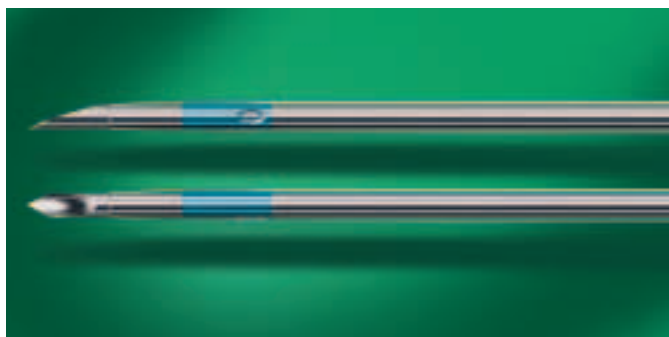


Technique how to remove spinal needle from catheter



Special introducer bevel feels similar to a Tuohy puncture, yet provides an undisturbed dural click feedback

Spinocath: The straight forward approach to controllable spinal anaesthesia



Over the needle design:

- immediately seals the puncture hole
- avoids initial CSF leakage
- minimizes the risk of PDPH

Standard G 27 Quincke spinal needle

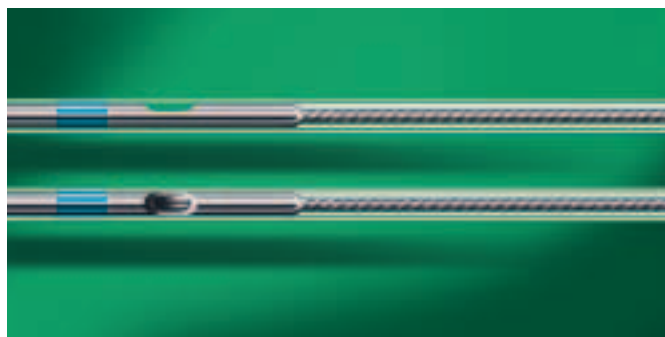
- tried and true handling
- less dural tenting
- reliable CSF flashback
- exact position feedback

Tapered catheter tip

- gently dilates the dura
- gives excellent tactile feedback and thus the first identification of successful dural puncture

Catheter side hole

- assures aspiration through a second opening
- available only in 22G not in 24G



CSF side hole for rapid CSF visualization

- positive identification of intrathecal catheter position within seconds

Smooth laser welded pull wire

- allows safe and easy removal of the spinal needle

Perifix® catheter material with large ID

- renowned for superior handling characteristics
- easy injection, aspiration and barbotage
- good distribution of anaesthetic
- safe spinal block
- suitable for syringe pumps (Perfusor®)

Note: Due to the new technique involved it is important to carefully read the instructions for use and to review the Spinocath video

Spinocath

The unmatched CSA catheter design



Spinocath: The complete set for safe and controllable CSA

Contents:

- 1 Epidural introducer needle 1.3 × 88 mm (18 G × 3 1/2") with cm markings
- 1 CSA over the needle spinal catheter system
- 1 Catheter luer lock screw connector
- 1 Epidural filter 0.2 µm, priming volume: 0.5 ml
- 1 Perifix® LOR syringe 10 ml luer slip
- 1 "SPINAL" sticker

Ordering information:

Product Description	Code Number	Sales Unit
Spinocath 22G with: – Catheter OD 0,85 × 720 mm (22G × 28") priming volume: 0,1 ml – spinal needle OD 0,42 mm (27G) Quinke – braided pull wire	451 7725	5
Spinocath 24G with: – catheter OD 0,71 × 720 mm (24G × 28") priming volume 0,1 ml – spinal needle OD 0,35 mm (29G) Quinke – braided pull wire	451 7717	5
Video "CSA: Continuous Spinal Anaesthesia with Spinocath", M. Möllmann, MD; english, 15:00 min PAL	604 9605	1
Video „Kontinuierliche Spinalanästhesie mit Spinocath" PD Dr. M. Möllmann, deutsch, 12:10 min PAL	603 9707	1

Literature:

- 1) Möllmann M., et al. Spinocath, a New Approach to Continuous Spinal Anaesthesia – Preliminary Results of a Multicenter Trial. International Monitor on Regional Anaesthesia. 1996: 74
- 2) Sell A., Van Steenberge A., Samarütel J., et al. Continuous Spinal Anaesthesia with "Spinocath" Technique. International Monitor on Regional Anaesthesia. 1996: 101
- 3) Holst D., et al. Intrathecal Distribution of Bupivacaine/ Lidocaine with the new Spinocath Catheter for Continuous Spinal anaesthesia. International Monitor on Regional Anaesthesia. 1996: 93
- 4) Denny N. et al. Postdural Puncture Headache After Continuous Spinal Anesthesia. Anesth. Analg. 1987; 66: 791 – 794
- 5) FDA Safety Alert. Cauda Equina Syndrome Associated With The Use Of Small-bore Catheters in Continuous Spinal Anesthesia. May 29, 1992
- 6) Sutter PA, Gamulin Z, Forster A. Comparison Of Continuous Spinal And Continuous Epidural Anesthesia For Lower Limb Surgery in Elderly Patients. A Retrospective Study. Anesthesia 1989; 44: 47–50

B | BRAUN
HOSPITAL CARE

B. Braun Melsungen AG
P. O. Box 11 20
D-34209 Melsungen
Tel +49-56 61-71-0
Fax +49-56 61-71-27 77
www.bbraun.com