

ELEKTRA

Trapezio-metacarpal prosthesis with cup:

- \varnothing 8.0 mm screw-fit (CoCr)
- \varnothing 8.0 mm screw-fit (CoCr/TA6V)
- \varnothing 6.5 mm press-fit (CoCr/TA6V)

Giving a circumduction of 120°.

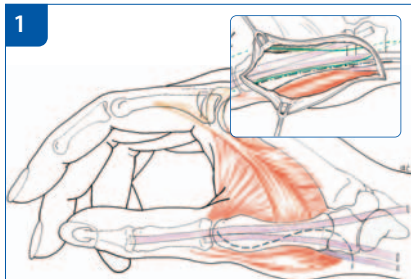
10 years of experience and more than 6000 Elektra™ implanted.



ELEKTRA™

Trapezio-metacarpal prosthesis with cup \varnothing 8.0 mm screw-fit or \varnothing 6.5 mm press-fit (CoCr/TA6V) giving a circumduction of 120°. 10 years of experience and more than 6000 Elektra™ prostheses implanted.

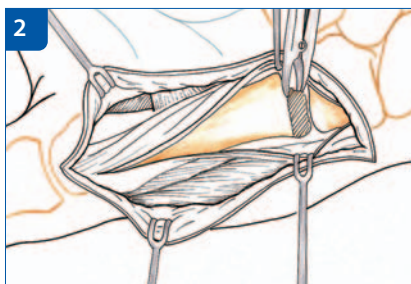
Surgical technique



Access

1. Access

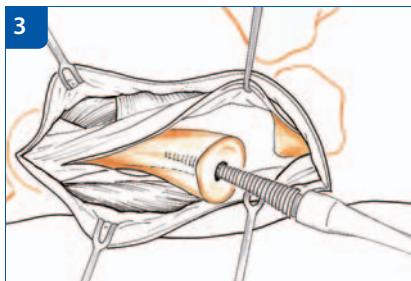
- Under locoregional or general anaesthesia and with pneumatic tourniquet.
- Posterior access or posteroexternal access at the junction of the palmar and dorsal skin, via an anterior route of access.



Metacarpal phase

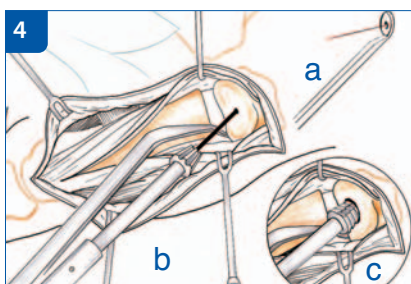
2. Bone section

- Performed with Liston's bone forceps or with an oscillating saw.
- Perpendicular section at the metacarpal axis removes 4 mm and may allow for insertion of the Abductor Pollicis Longus if required.
- Perform resection of the internal process of the metacarpal in order to avoid any elevator effect.



3. Preparation of the diaphyseal shaft

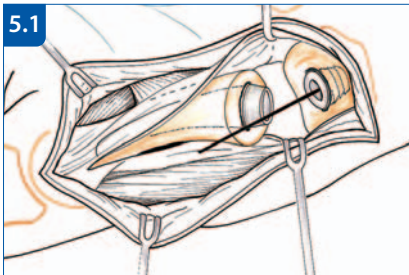
- Locate the medullary canal with the aid of a fine square point or a small curette.
- Insert the adapted rasp with due respect for its anatomical profile. Place the back of the rasp against the dorsal edge of the metacarpal bone.
- The last tooth of the rasp must be completely inside the medullary canal and by the cut.



Trapezial phase

4. Preparation of the trapezium

- Trim off osteophytes as required
- Place the positioning guide on the trapezium; locate the radial, ulnar and palmar limits of the trapezium so that the drilling guide pin can be correctly centred. This is the most delicate phase: this is because the orientation of the cup will depend on the position of the pin. (a)
- The pin can be impacted directly at the centre of the positioning guide. This can be started with the motor and finished with an impactor suitable for the pin being used.
- Use the cannulated bur until the surface of the trapezium shows through. (b)
- Insert a cannulated tap to form the threads (c) for screw-fit cups. **Omit this last stage for press-fit cups.**

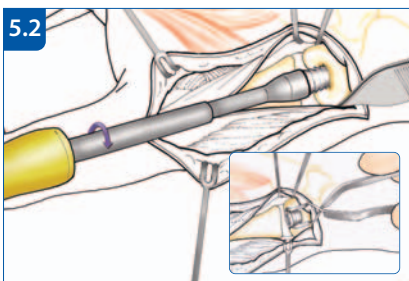


5.1. Putting in a CrCo screw-fit cup

Indication : For difficult exposure of the trapezium and positioning of the cup necessitating use of the guide pin

- Screw the cup onto the pin, use the screwdriver with the blue handle. Stop as soon as it feels tight.

CAUTION : Forcing is pointless and risks weakening the trapezial attachment.

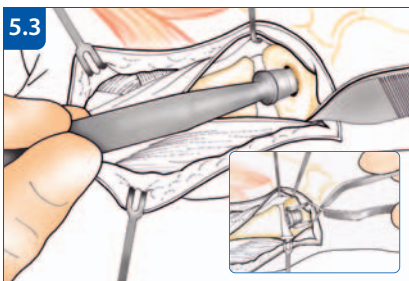


5.2. Putting in a bi-material CoCr/TA6V screw-fit cup

Indication : Better osteointegration and positioning of the cup not necessitating use of a guide pin.

- Remove the pin from the trapezium. Position the implant: use escargot tongs to position the cup in the trapezium so as to improve centring before screwing.
- Screwing in the cup: use the screwdriver with the yellow handle.

CAUTION : Forcing is pointless and risks weakening the trapezial attachment.

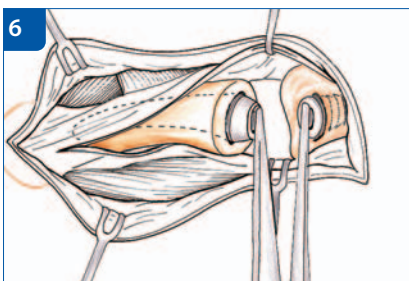


5.3. Putting in a bi-material CoCr/TA6V impacted cup

Indication : Better osteointegration, presence of a small-sized trapezium

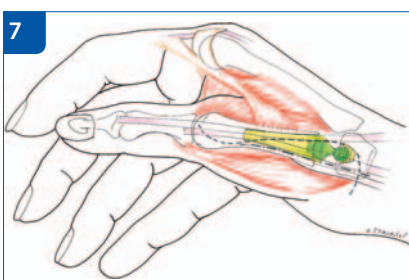
- Remove the pin from the trapezium. Position the implant: use escargot tongs to position the cup in the trapezium so as to improve centring before impaction.
- Use the round-ended cup impactor which is also used for the cemented cup.

IMPORTANT : The bi-material cups are made from titanium, with a chromium-cobalt insert. There is a cemented cup for repeats and for patients suffering from nickel allergies in first intention.



6. Impacting the neck

- Choose neck lengths with the aid of the retractor gauge. Do not forget to look for a reduction in pressure at this level.
- Trial neck test.
- Insertion of final neck.



7. Reduction of the prosthesis

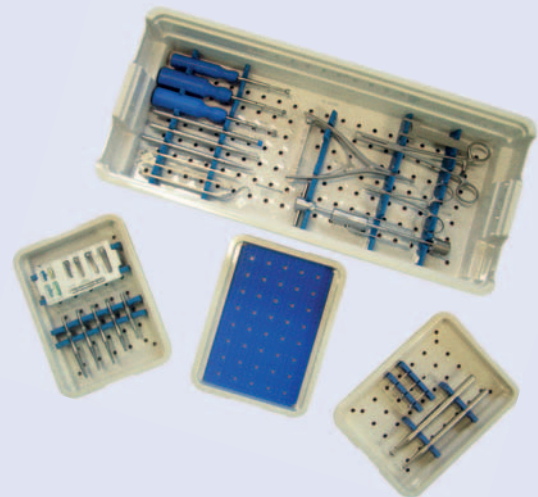
- Test mobility and stability.
- The articular capsule is closed up in tension.
- The final stage involves immobilisation of the hand with plaster for 3 weeks, followed by simple active movement.

Instruments

Description	Ref.
Rasp impactor	650.501
Wrench 18	650.556
Rasp, dia. 6 mm	650.306
Rasp, dia. 7 mm	650.307
Rasp, dia. 8 mm	650.308
Rasp, dia. 6 mm, short	650.305
Metacarpal component holder	650.200
Trial stem, dia. 6 mm	650.312
Trial stem, dia. 6 mm, short	650.309
Trial stem, dia. 7 mm	650.311
Trial stem, dia. 8 mm	650.313
Metacarpal component extractor	650.319
Bone elevator (for trapezium)	650.317
Guide pin impactor	650.301
1,8 mm pin (x2)	650.316
Positioning guide for trapezial cup (small)	650.321
Positioning guide for trapezial cup (Large)	650.327
One part cannulated screwdriver	650.323
One part cannulated hand reamer (for trapezium)	650.324
One part cannulated tap	650.326
Cup holder	650.310
Neck impactor	650.230
Neck spreader/measurer	650.240
Neck holder	650.250
Trial neck extra-short	650.314
Trial neck short	650.276
Trial neck medium	650.277
Trial neck long	650.278
Socket Thruster (Without Collar)	650.205
Socket Thruster (With Collar) TMC	650.220
Burr dia. 4mm T.M.C.	650.270
Burr dia. 5mm T.M.C.	650.271
Burr dia. 7mm T.M.C.	650.272
Instrum. tray "Cup for cementing"	650.330
Bi-material cup screwdriver	901.0019
Cup holding forceps	914.0019
ELEKTRA set, base & lid	650.320

Implants

Description	Ref.
Short stem size 6	500.203
Stem size 6	500.201
Stem size 7	500.200
Stem size 8	500.202
Extra short neck CoCr	500.116
Short neck CoCr	500.121
Medium neck CoCr	500.131
Long neck CoCr	500.141
Screwed cup CoCr	500.250
Bi-material screwed cup TA6V/CoCr	930.1020
Bi-material press-fit cup TA6V/CoCr	930.1024
Cement	305.101
Polyethylene cup	500.150



Small Bone Innovations International

ZA Les Bruyères
 01960 Péronnas – France
 Tel. +33 (0) 474 21 58 19
 Fax +33 (0) 474 21 43 12
 info-intl@totalsmallbone.com

www.totalsmallbone.com