

GT TUNNELER



SIMPLICITY FOR ARTHROSCOPIC TRANSOSSEOUS

GT Tunneler (GT-T) is a tunneling device for Transosseous rotator cuff repair. **GT-T** is a quick and easy way to create transosseous tunnels in the humeral head.

GT Tunneler is indicated for the repair of any type of rotator cuff tear pattern by allowing to pierce the humeral head, and it's designed to achieve a durable transosseous repair configuration.

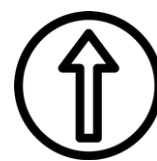
GT Tunneler is for single use and can be used to create multiple bone tunnels without the need of additional instrument sets. The tip is equipped with auto-guidance internal system designed to fit the anatomy of the greater tuberosity in order to facilitate the insertion and use. The straight tunnel shape avoids the risk of suture slack and provides a stable fixation over time.



**NO ADDITIONAL
INSTRUMENT
SET NEEDED**



SINGLE USE



STRAIGHT TUNNEL



**COST
EFFECTIVE**



**EXTREMELY
EASY TO USE**



**DESIGNED TO PROVIDE
A LONG-LASTING
FIXATION**

Contact us: www.ncs-company.com

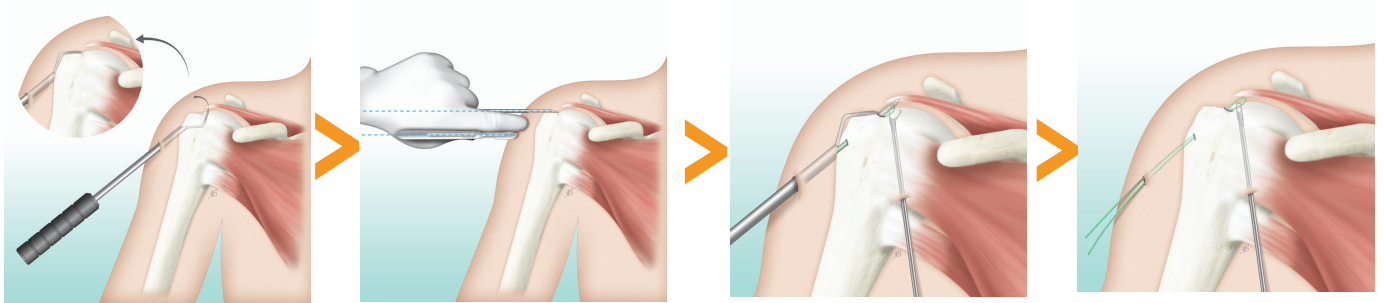
NCS | NCS Lab Srl
Via Pola Esterna 4/12 41012 Carpi (MO)
Ph. +39 059 669813



COMBINED SOLUTIONS FOR INDUSTRY

The **GT Tunneler** is inserted into the patient's arm and the anterior part of the cannula is placed on the large tuberosity.

The anterior cannula has a special profile designed to fit the shape of the greater tuberosity. Once the correct positioning of the handle is verified, the **GT-T** drill, located inside the handle, is gently tapped creating the desired transosseous tunnel.



GT Tunneler kit:

- Gt-Tunneler device
- Inner drill

TESTIMONIAL



"THE GT TUNNELER IS SIMPLE TO USE AND GIVES REPRODUCIBLE GOOD RESULTS FOR ROTATOR CUFF REPAIR. THE ADVANTAGE IS THAT IT GIVES STRAIGHT TUNNELS AND YOU DON'T NEED A SPECIAL INSTRUMENT SET, JUST A HAMMER. THE TECHNIQUE FOR TUNNEL MAKING IS VERY STRAIGHT FORWARD.

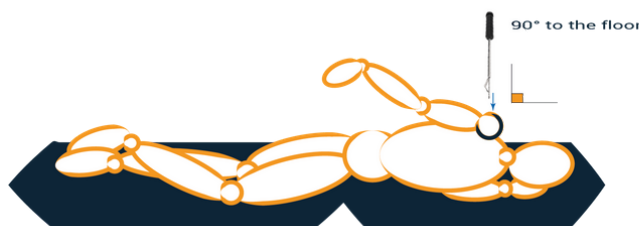
THIS METHOD IS VERY COST EFFECTIVE AND CAN BE USED WITH DIFFERENT SUTURE CONFIGURATION."



Pol Huijsmans
Orthopedic Surgeon
Bergman Clinics



LATERAL DECUBITUS



BEACH CHAIR

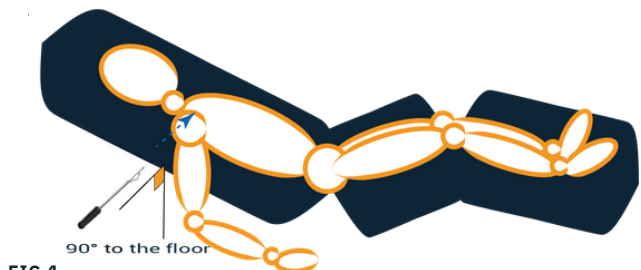


FIG 1

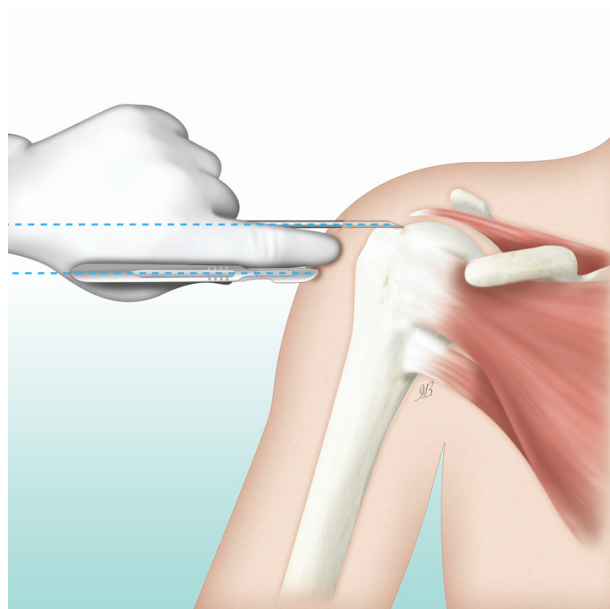


FIG 2

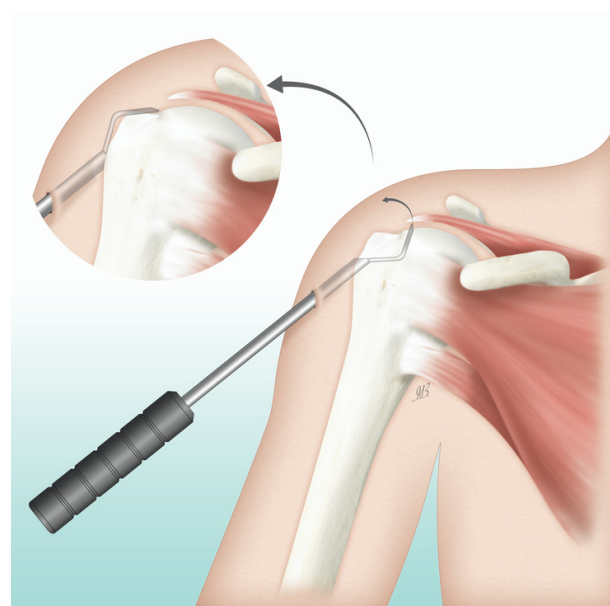


FIG 3

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Position of the patient according to the surgeon's preference.

Fig.1

Normal arthroscopy, standard 3 portals: posterior, lateral and anterolateral portal.

Assess rotator cuff tear and the best way for reduction.

Clean bursa and subacromial decompression (if necessary and/or when it is part of routine treatment protocol).

Place a spinal needle horizontal and flush over the greater tuberosity. Position the needle in the antero-posterior direction at the desired position of the bone tunnel.

Fig. 2

Place a finger on the skin under the spinal needle and make a small incision.

Fig. 2

Through the anterolateral portal bring in a blunt trocar down in the bursa and "open" the bursa.

Fig. 2

Through the skin incision under the finger, bring in a switching stick and push it into the bursa to the level of the greater tuberosity.

Fig. 3

Remove switching stick and push in the GT-Tunneler gently in the same direction.

Fig. 3

Push the GT-Tunneler as high as needed to see the opening for the k-wire.

Fig. 3

Press the opening for the k-wire against the lateral cortex and shift the GT-Tunneler down, aiming with the tip to the desired position on medial edge of the footprint.

Fig. 3

Hold the GT-Tunneler firmly down on the footprint and against the lateral cortex of the greater tuberosity

Fig. 3

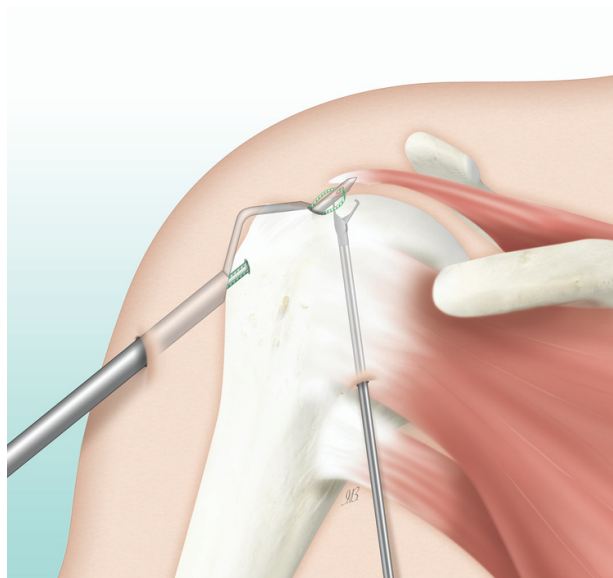


FIG 4

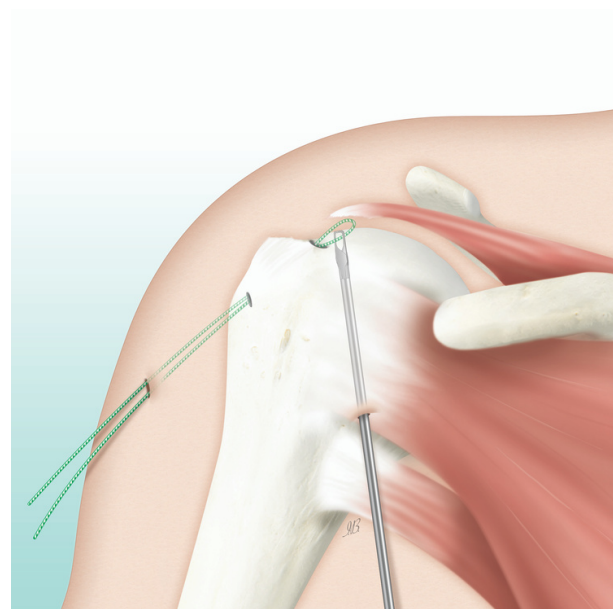


FIG 5

13

Tap the k-wire (loaded with a 70 mm no. 2 vicryl suture), until the tip of the k-wire with suture is coming out 1-1.5 cm of the bone at the medial edge of the footprint.

NB: It is very important to press the GT-Tunneler down on the bone while tapping, so it cannot shift up.

Fig. 4

14

Gently pull back the k-wire about 1 cm, so the vicryl suture at the tip of the K-wire forms an open loop .

Fig. 4

15

The loop can be grabbed with a suture retriever from the anterolateral portal, or with a suture retriever device that has already passed the tendon. Just hold the loop in place, don't pull on it at this stage.

Fig. 4

16

Retract the k-wire (during the retraction check that both ends of the vicryl strands remain outside the guide).

Fig. 5

17

With a suture retriever the loop can now be pulled through the tendon outside the skin.

Fig. 5

18

Push the GT-Tunneler up in the bursa, the two vicryl strands can be taken out with a suture retriever through the anterolateral portal (make sure the loop is not pulled in).

By doing this, there is no need to go deep down into the bursa to find the sutures.

Fig.5

19

Make a small skin incision approximately 1 cm anterior of the first distal portal and check with the spinal needle of the anterior part of the greater tuberosity is easily reached

20

Repeat steps 8-18 to create the second bone tunnel

21

Further technique depends on the chosen suture configuration

22

Depending on type of tear and involved tendon(s), the location of the bone tunnels may be adjusted.

Manufacturer:
NCS | NCS Lab Srl
 Via Pola Esterna 4/12 41012 Carpi (MO)
 Tel. +39 059 669813