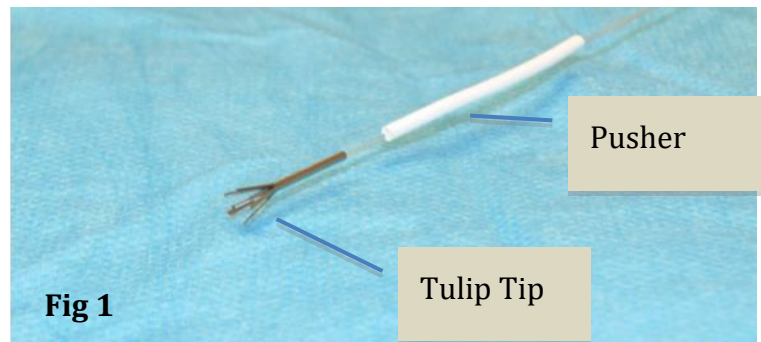


## *Tulip-Tip Catheter Instructions for Use:*

The Tulip Tip fibre is a 600 µm fibre with the special Tulip shaped spacer attached to the distal end. This spacer is designed to prevent the hot tip from perforating the vein wall, to keep the tip centred in the vein and to prevent accidental displacement of the tip towards the SF junction. To be able to introduce this fibre into the vein, the EVLA set consists of a matching set of items: the fibre, an 18G needle, a 150cm guidewire, a 70cm, 6.8 Fr catheter + dilator. Over the fibre, in between the touhy-borst adaptor and the tulip you will find the pusher (Fig 1)



**To correctly use the Tulip Tip fibre please follow the instructions given below carefully.**

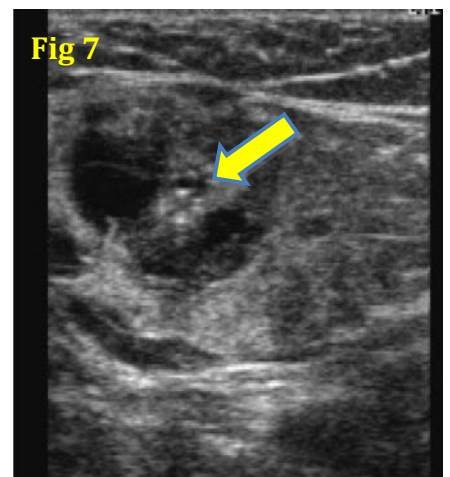
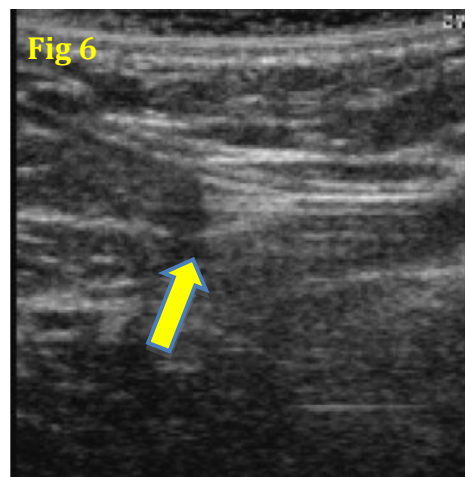
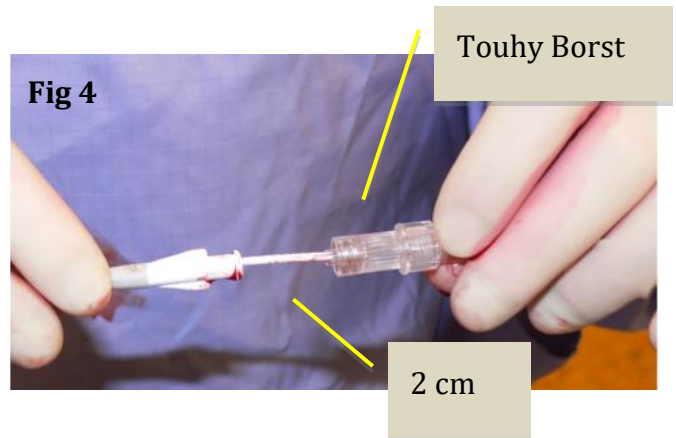
- 1) First make access to the vein by puncture. Introduce a guidewire through the needle. (Fig 2)
- 2) Make a small skin incision at the puncture point.
- 3) Remove the needle and push dilator and catheter over the guidewire. (Fig 3)
- 4) Control position of catheter with ultrasound at the saphenofemoral junction. Remove the dilator and the guidewire.
- 5) Remove the fibre from the unwind protector starting at the distal end (the Tulip-Tip). If so desired, part can remain on the unwind protector until needed.
- 6) Slide the white pusher (Fig 1) from behind over the Tulip Tip in such manner that it covers the Tulip Tip and folds the leaves together. **DO NOT REMOVE** this pusher completely from the fibre as it will render the fibre useless.



7) Introduce the tulip-fibre into the catheter by inserting the pusher into the luer connector and pushing the fiber into the catheter. The pusher will stay behind.

8) Push the fiber through the catheter until the touhy-borst adaptor is approx. 2 cm from the distal end of the catheter (Fig 4). While keeping the fiber at a fixed position pull back the catheter from the leg and fix the distal end of the catheter to the fibre. At this moment the tulip blades are expanded (Fig 5).

9) Control it's position using ultrasound. The blades are visible. (Fig 6 , Fig 7)



When the tulip is positioned too deep the venous system, just withdraw it to the desired position. If the tulip is situated too distally in the saphenous vein, then it is impossible to push the fiber (tulip with open blades) more proximal. To reposition the tulip, it first has to be withdrawn into the catheter (folding the blades) and then the catheter can be repositioned more proximal. If necessary the guidewire has to be reintroduced.

Further the procedure following the protocol as used with a regular fibre.

