



SURGICAL TECHNIQUE

Knee

ACL reconstruction with cortical femoral fixation (ACF)



Required material

1 Implants

To realize this surgical technique, you will required the following Orthomed implants :

- Suture ligament anchor IKARIOS® #2
- Femoral cortical fixation sizes 15 to 40 mm
- MISBIO® interference screws range : \varnothing 6 to 11 mm, lenght 23 to 35 mm.
- Ligament staples (optionnal) : 6 and 8 mm



Suture ligament anchor
IKARIOS® #2



Femoral cortical fixation
«ACF»



MISBIO® bioresorbable
interference screws



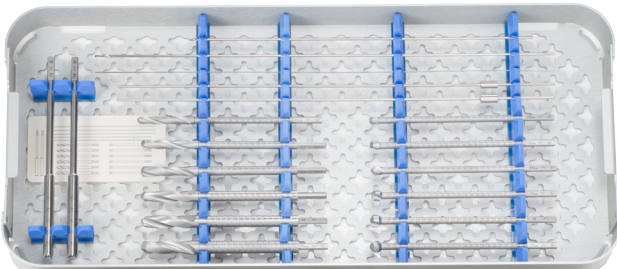
Optionnal

Ligament staple

2 Instruments

To realize this surgical technique, you will required the following Orthomed instruments :

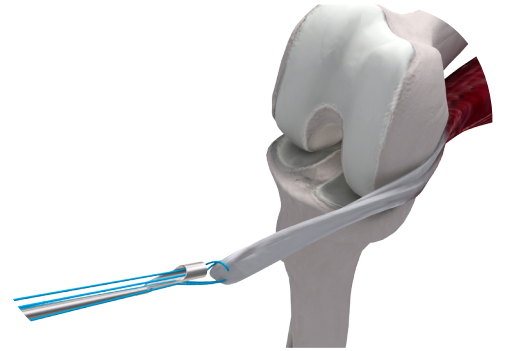
- Kit KJ
- Kit DIDT



Procedure

1 Transplant sampling

Semitendinosus sampling using an opened or a closed stripper (5802-A or 5803-A).



2 Positionning of the aimer & drilling of the tibial cortical

Orthomed ACL reconstruction system ensures a reproducible positionning of the tibial tunnel thanks to the anatomical references (the center of the tunnel is located 7mm ahead of the PCL between the 2 tibial spines).

Insertion of the tibial aimer (1191-A + 1192-A + 1193-A) by the anteromedial way, 90° bended knee (the aimer point will be placed at the base of the PCL).
Insertion of the guide pin (3103-A) with an angle of 50°.



3 Positionning of the femoral aimer and drilling a blind tunnel (30mm)

Introducing the femoral aimer 5, 6, or 7 mm (1040-A or 1041-A or 1042-A) by the antero-medial way («over the top» position).

Insertion of the drilled pin with eye (3202-A), then a reamer to drill a 30mm femoral blind tunnel.



4 Preparation of the femoral tunnel for the ACF

Drill with a pin with eyelet (3202-A) up to the femoral cortical, then remove the reamer.

Insert on the pin with eyelet a $\varnothing 4,5$ or 5mm cannulated drill (2308-B ou 2309-B). Drill the tunnel until the femoral cortical.

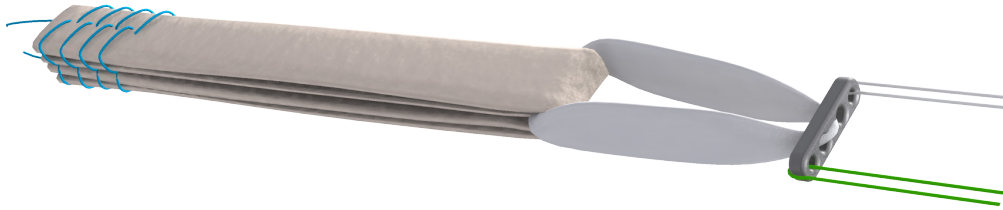
Measure the total length of the femoral tunnel using the gauge (5701-A).



5 Preparation of the tendons on Orthomed benchwork

Positionning of the transplant on the benchwork (5620-B + 5621-B + 5622-A + 5623-A + 5624-A + 5625-A). Put it in tension with the dynamometric tension system.

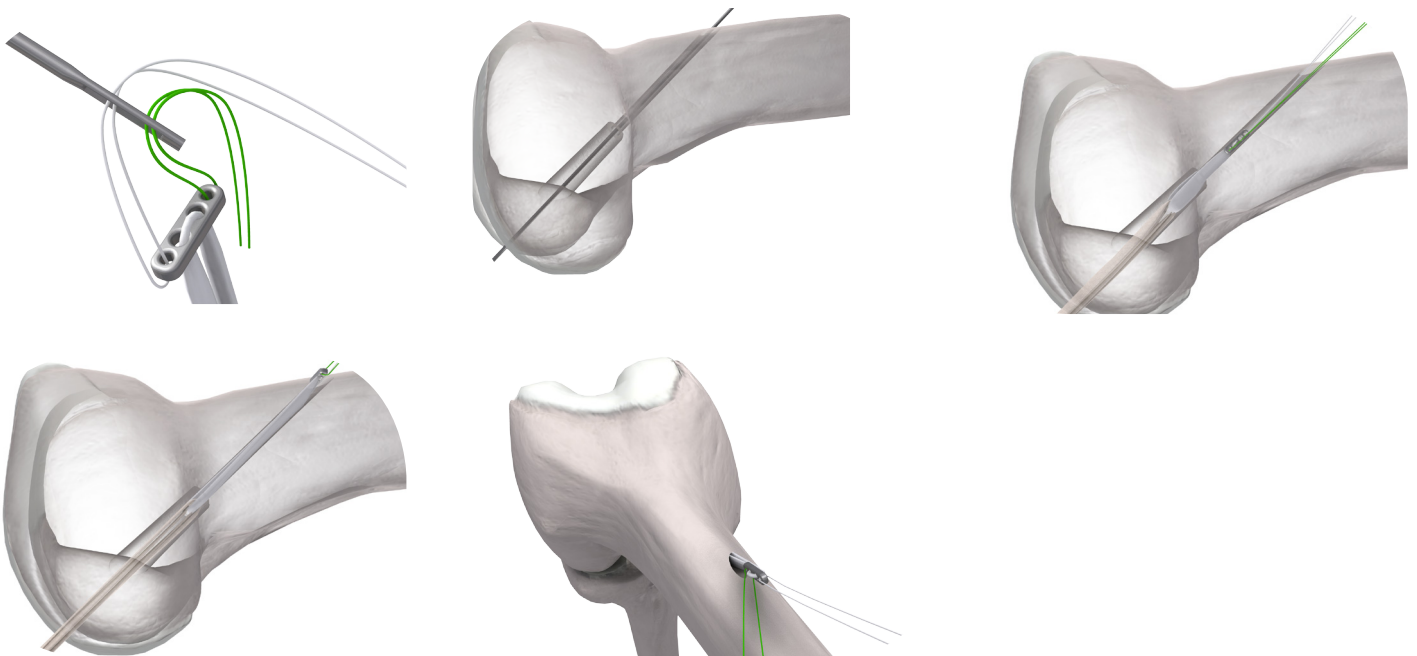
After suture with IKARIOS (1266002) and calibration (4101-A or 4102-A), put the transplant in the ACF polyester loop once the length has been found (15-40mm). The length of the ACF is determined considering the difference between the total length of the femoral tunnel and the length of the femoral tunnel where we put the transplant.



6 Introduction of the transplant + ACF by the tibial tunnel

Put the transplant with the ACF by the tibial tunnel. Put the 2 threads in the pin with eye, pull the transplant until the blind tunnel.

Once in the femoral cortical, pull one of the threads in order to tip up the ACF metallic part and pull it out the femoral tunnel.



7 Tibial fixation

Positionning the flexible pin (3602-A) on the transplant in the tibial tunnel. Insert the MISBIO interference screw (lg 23, 30 ou 35 mm, diameter 1 or 2 mm superior to the one of the tibial tunnel). Avoid any rotation of the transplant during the insertion of the absorbable screw.

Additional fixing possible using ligament staples (6, 8 or 11 mm).



1 «KJ» instrument set

2300-B	Cannulated and graduated reamer	Ø 7mm	1
2301-B	Cannulated and graduated reamer	Ø 8mm	1
2302-B	Cannulated and graduated reamer	Ø 9mm	1
2303-B	Cannulated and graduated reamer	Ø 10mm	1
2304-B	Cannulated and graduated reamer	Ø 11mm	1
2305-B	Cannulated and graduated reamer	Ø 12mm	1
2310-A	Cannulated drill	Ø 7mm	1
2311-A	Cannulated drill	Ø 8mm	1
2312-A	Cannulated drill	Ø 9mm	1
2313-A	Cannulated drill	Ø 10mm	1
2314-A	Cannulated drill	Ø 11mm	1
2315-A	Cannulated drill	Ø 12mm	1
3103-A	Tibial drilled pin	Ø 2.5mm - Lg 300	2
3202-A	Drilled pin with eye	Ø 2.5mm - Lg 400	2
3602-A	Flexible pin	Ø 1mm - Lg 400	2
5001-A	Trephine	Ø 9mm	1
5005-A	Collared pin positionner	Ø 9mm	1
5003-A	Trephine	Ø 10mm	1
5006-A	Collared pin positionner	Ø 10mm	1
0010-C	Screwdriver for titanium interference screw	6 pans / 3.5mm	1
0031-A	Screwdriver for MISBIO interference screw		1
1040-A	Femoral aimer	Offset 5mm	1
1041-A	Femoral aimer	Offset 6mm	1
1042-A	Femoral aimer	Offset 7mm	1
1191-A	Tibial aimer handle with variable aiming angles	-	1
1192-A	Tibial aimer point	-	1
1193-A	Aiming sleeve	-	1
4101-A	Transplant gauge	Ø 7 to 12mm	1
4910-C	Curette	-	1
5011-A	Dilator	-	1
4200-A	Cutting template	-	1
4861-A	Transport box	-	1
4862-A	Transport box	-	1
4863-A	Transport box	-	1

2 «DIDT» instrument set

0210-A	Staple driver	-	1
0300-A	Impactor	-	1
2308-B	Cannulated drill	Ø 4.5mm	1
2309-B	Cannulated drill	Ø 5mm	1
4102-A	Transplant gauge	Ø 6 to 11mm	1
5701-A	Length gauge	-	1
5802-A	Opened stripper	Ø 5mm	1
5803-A	Closed stripper	Ø 7mm	1
5620-B	Benchwork	-	1
5621-B	Polyethylene plate	-	1
5622-A	Ligament tensiometer	-	1
5623-A	Blocking hook for half tendinous	-	1
5624-A	Half tendinous adapter	-	2
5625-A	Closing pin	-	2
2330-A	Cannulated and graduated reamer	Ø 7.5mm	1
2331-A	Cannulated and graduated reamer	Ø 8.5mm	1
2332-A	Cannulated and graduated reamer	Ø 9.5mm	1
2333-A	Cannulated and graduated reamer	Ø 10.5mm	1
4871-A	Transport box	-	1
4872-A	Transport box	-	1
4863-A	Transport box	-	1

