



NOVETECH
SURGERY

NOVALIG

Synthetic Ligament

HIGH POROSITY
Allows fibroblastic and soft tissue to colonise

MEDICAL GRADE FIBRE
Ensures perfect biocompatibility, flexibility, strength & abrasion resistance

INTEGRITY OF THE LIGAMENT
The fibres run the whole length of the ligament thus giving strength and resistance to the whole implant

CORTICAL BUTTON
Enables a strong, quick, and reliable fixation



2

	K-wire Diameter millimètre	Drill Bit Diameter millimètre	Screw size millimètre	Approx. resistance of the ligament newton
Novalig 2000 - Button	1.2	2.5	3.5	2000
Novalig 4000 - Button	2	3	4	4380
Novalig 4000	2	3	4	4380
Novalig 8000	2	3.6	4.5	8200

THE CHOICE OF THE LIGAMENT DEPENDS ON ANIMAL'S WEIGHT AND ACTIVITY

The selection criteria for the size of the ligament to be implanted is in relation to the weight of the dog, the level of activity and to be compatible with the bone size;

As an indication :

- 5-10 kg : NOVALIG 2000
- 10-15 kg : NOVALIG 4000
- + de 15 kg : NOVALIG 8000

We use the first and one of the only Medical Grade UHMPWE Fibres in the world to ensure the safety and biocompatibility of the implant for your practice and patients.

Used in million of patients, its high flexibility enables to reduce inflammatory reaction and irritation accelerating recovery.

MANAGEMENT OF TERES / ROUND LIGAMENT REPAIR WITH AN INTRA-ARTICULAR SYNTHETIC LIGAMENT WITH OR WITHOUT A CORTICAL BUTTON

Developped with DMV Philippe Buttin, Formation ECVS
Referal Activity in the Alps, France

STEP 1 Surgical Approach

STEP 2 Drilling of the femoral tunnel

STEP 3 Drilling of the acetabular tunnel

STEP 4 Passing of NOVALIG

STEP 5a No Cortical Button technique : Drilling and ilium fixation

STEP 5b Acetabular fiixation with NOVALIG with a cortical button

STEP 6 Femoral fixation



STEP 1

4



SURGICAL APPROACH

A standard craniolateral access to the hip is performed. Then, both the upper and deeper layers of the fascia lata are incised. The luxated femoral head is evaluated showing the torn ligament.



DRILLING OF THE FEMORAL TUNNEL

External rotation of the femur is performed to remove the femoral head from its physiological anatomical site and therefore, allow the introduction of a drill guide, the tip of which is inserted into the fovea capitis. The external part of the drill guide is placed at the distal base of the great trochanter with a slightly caudal orientation to respect the ante version of the femoral neck. A 2,0mm sharp K-wire is inserted into the drill guide crossing the proximal epiphysis of the femur according to the aforementioned axis. A cannulated drill bit relating to the size of the implant is then over drilled on the K wire for the first tunnel.

A second tunnel can be performed perpendicularly to the distal exit of the first trans- trochanteric tunnel exit for the screw fixation. This is recommended.

STEP 3



DRILLING OF THE ACETABULAR TUNNEL

A Hohmann retractor is used to retract caudally the femur and allow the view of the acetabulum. Another 2-mm K wire is directly inserted into the acetabular fossa and the teres /round ligament, thus allowing for a third tunnel with the relevant cannulated drill bit.

In order to protect the soft tissue at the back of the acetabulum, an instrument similar to a "spoon" can be used.

6

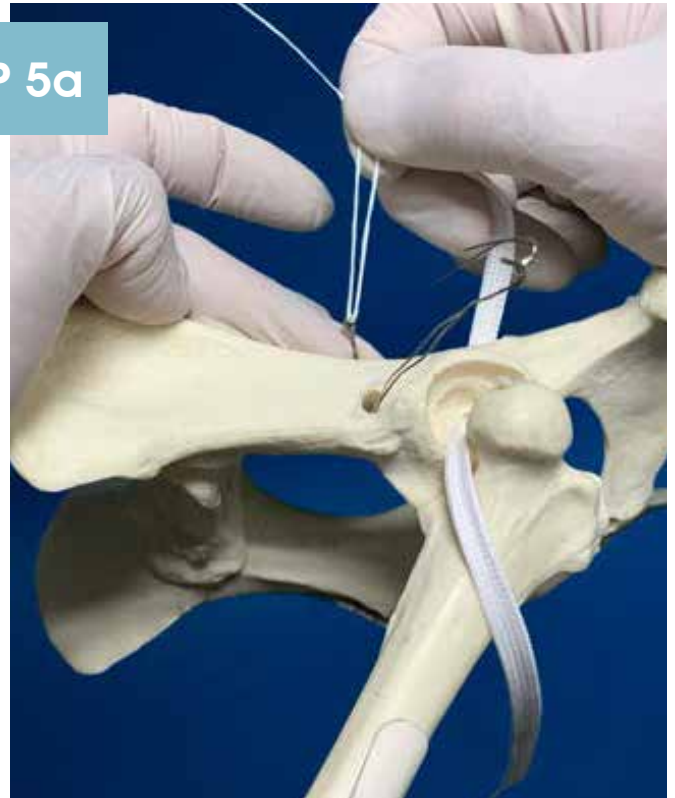
STEP 4



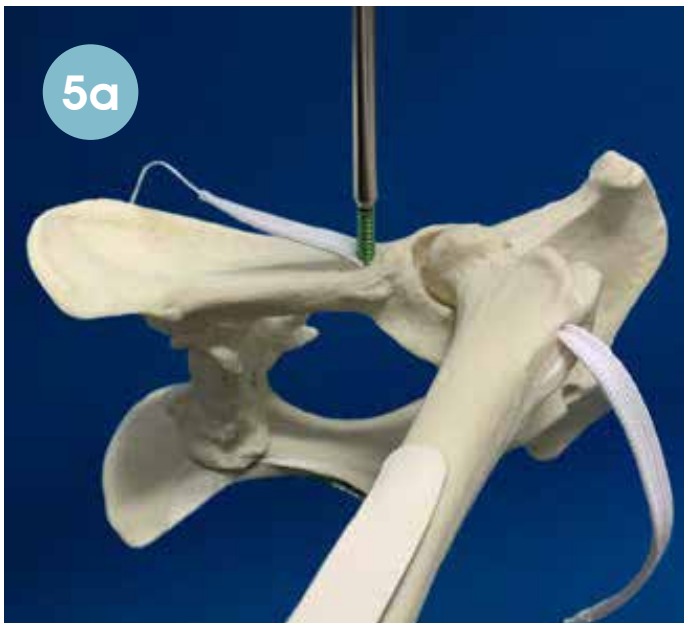
PASSING OF NOVALIG

Before the passage of the ligament, it is recommended to tap all the tunnels that will need an interference screw as a fixation system. To do so place the blunt K-wire guide in the tunnel, screw and unscrew partially into the empty tunnel, use the same screw you have chosen to fix the ligament in order to thread the tunnel. A wire-loop is inserted into the acetabular tunnel from the joint, following the ventral and cranial direction, and then pulled back ventrally behind the insertion of the rectus thigh muscle. The ligament leader threads connected to the ligament prosthesis are inserted into the wire loop to allow pull through into the acetabulum. The wire loop is then inserted into the trans-trochanteric tunnel to pass the ligament prosthesis, which is then passed through the femoral tunnel, from back to front, tunnel if it has been drilled. This method is also used for the passage of the prosthesis in the ilium if we use a NOVALIG without a button.

STEP 5a



5a

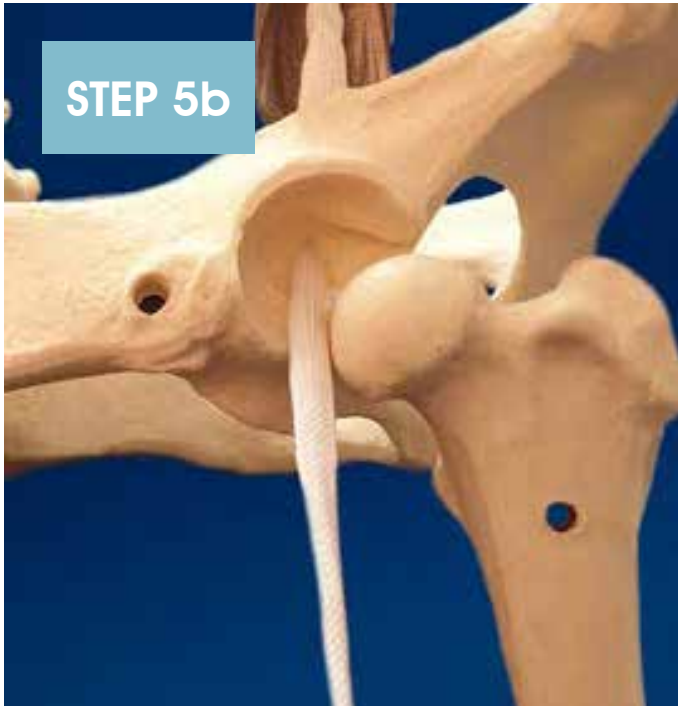


OPTION FOR NO CORTICAL BUTTON DRILLING AND ILIUM FIXATION WITH NOVALIG

A fourth tunnel is made in the ilium cranially to the acetabular lip in the lower ventral third of the ilium using the same procedure as before with the appropriate K-wire and cannulated drill bit.

After tapping the tunnel, we pass the NOVALIG with the same method with the wire loop. The first screw is introduced into the tunnel of the ilium.

STEP 5b



ACETABULAR FIXATION USING NOVALIG WITH A CORTICAL BUTTON

When using a NOVALIG with cortical button, the passage of the prosthesis is performed with the same procedure using the wire loop and the "spoon". Ease the ligament as much as possible with your fingers through the bone tunnel until you obtain cortical contact from the button.

STEP 6



FEMORAL FIXATION

The reduction of the femoral head in the acetabulum is made while tension is applied to the trochanteric exit of the prosthesis by means of Kocher clamps. At this step of the surgery it is of crucial importance to apply a force onto the great trochanter with the direction towards the acetabulum, and to place the limb in its physiological position. An interference screw is used to fix the ligament into the primary femoral tunnel or in the perpendicular femoral tunnel to maximise biomechanics.

To introduce the screw a blunt K-wire guide is inserted along the NOVALIG to enable the proper insertion of interference screw while maintaining the tension.

Finally, the joint capsule is re-constructed and the surgical site is washed out before being closed. A dressing is applied on the surgical incision.

POSTOPERATIVE CARE

No immobilisation, Control the activity of the dog, leash. Strict rest for 6 weeks.



OR















NEW IMPLANT - NOVALIG WITH CORTICAL BUTTON



9

INTERFERENCE SCREW

-  Diam. 2,5mm * Length 9 mm
-  Diam. 3 mm * Length 11 mm
-  Diam. 3,5mm * Length 11 mm
-  Diam. 4 mm * Length 13 mm
-  Diam. 4,5mm * Length 15 mm
-  Diam. 4,5mm * Length 20 mm
-  Diam. 5 mm * Length 15 mm
-  Diam. 5 mm * Length 20 mm
-  Diam. 5 mm * Length 25 mm
-  Diam. 6 mm * Length 15 mm
-  Diam. 6 mm * Length 20 mm
-  Diam. 6 mm * Length 25 mm

INSTRUMENTATION

A complete instrumentation kit is available for general ligamentoplasty using NOVATEN or NOVALIG.



Find us on



NOVETECH SURGERY provides to the veterinarians a range of synthetic reinforcement systems for soft tissues based on years of experience.

In addition of the implants themselves, NOVETECH SURGERY offers their fixation systems, as well as their instruments and power tools.



NOVETECH SURGERY IS THE FOUNDING PARTNER OF IGOS .

Innovation Group for Orthopaedic Surgery.

IGOS is an international group allowing collaboration between surgeons enhancing scientific research on physiological orthopaedic repair using latest technologies.

www.igos-vet.com

WE ARE INVOLVED IN PAIN MANAGEMENT.

We are working on pain management thanks to less traumatic procedure, or better pain management in our postoperative processes.



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ATTENTION : En complément de cette technique opératoire, il est nécessaire de se former auprès d'un chirurgien expérimenté avant toutes applications de ce produit.