PATELLOFEMORAL REALIGNMENT:

The “Dinamic Quadriceps”

As a new technique

Guillermo Zvietcovich Cornejo MD.
Rolando Suarez Peña MD.
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I have no financial conflicts to disclose.

Rolando Suarez Peña MD.
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The trochlear patella instability is dependent on the ligamentous balance of its medial and lateral retinacular components.

The imbalance generates osteochondral lesions that act as triggers of early osteoarthritis.
The Patella Femoral Ligament Reconstruction is a surgical technique used to correct in some cases this imbalance.

Conventionally this procedure requires the fixation of the graft but multiple studies describe a high rate of failure, leading to an unwanted overload of patellofemoral.
Overload of Patellofemoral

Early Osteoarthrosis
We consider as possible solutions: **“Preserve”**

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<th>Sub condral circulation</th>
<th>• No perforations in patela</th>
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<td>• No hardware in patela</td>
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| Neurosensitive control        | • Use of pedicled and         |
|-------------------------------| vascularized grafts that      |
|                               | maintain proprioception in   |
|                               | the Medial Patellofemoral     |
|                               | ligament.                    |

| Elasticity and versatility of PFML | • Use of Medial Stabilization, in a functional point and not necessarily anatomic or isometric point. |

Our Technique: “Dynamic Quadriceps”

Aunto - Graft:

1. Quadriceps Tendon

2. Pediculated in superior pole of patella.

3. Longitude average 12cm.
Our Technique: “Dynamic Quadriceps”

- Medial Stabilization: Dynamic
- Tenodesis around Tendon Adductor Magnum
- Suture with high resistance points in flexion of 10°
Our Technique: “Dynamic Quadriceps”

- No post-surgical immobilization
- Flexion and extensión non-limited premature.
Our Technique: “Dynamic Quadriceps”

- Support with axillary crutches for 1 week
- Therapy with passive isokinetic movements from the first week
Our experience:

• Number of cases treated: 16

• Average Age: 22.4 years (S.D. ±7.6)

(Friedman test) – (Kendall’s W test): Both assessments were statistically significant (P-value < 0.0001)
We can conclude that:

The technique of patello-femoral Realignment by "Dynamic Cuadriceps” clinically improves the outcome of patients respecting the anatomic parameters and subchondral circulation.
References


