

**PATELLOFEMORAL PAIN SYNDROME (ANTERIOR KNEE PAIN SYNDROME)**

Excessive Lateral Pressure Syndrome:

- low load long duration stretch of tight structures (ie taping)
- US to lateral retinaculum prior to mobilizations
- Stretch tight lateral retinaculum with medial glides and tilts
- Flexibility exercises with emphasis on ITB
- Quadriceps strengthening

Global Patellar Pressure Syndrome:

- Avoid taping
- Emphasize patellar mobilizations
- Frequent unresisted knee ROM
- Flexibility exercises
- Initially strengthen with M>I, SLR, mini-squat progressing to leg press, wall squat, lunges, step-up

Patellar Instability:

- Taping and/or bracing
- Address malalignment through stretching and orthotics
- Pain-free quads strengthening
- Activity modifications

Direct Patellar Trauma:

- LE flexibility
- Low resistance ROM initially
- Quad strengthening M>I, SLR, mini-squat, short arc avoiding painful ROM progress to leg press, step-up, lunge

Plicia Soft Tissue Lesion:

- Decrease inflammation with modalities
- XFmassage to reduce fibrotic scarring
- Address contributing factors ie: muscle tightness, weakness, malalignment

Infrapatellar Fat Pad Syndrome:

- Tape to unload fat pads
- Address malalignment through stretching and orthotics
- Pain-free strengthening avoid terminal extension
- Phonophoresis/ Ionto followed by cryotherapy
- Heel lifts

Overuse Syndrome and Apophysitis:

- Warm-up before activity and ice after
- Emphasize flexibility
- Activity modification based on symptoms
- Modalities for pain-relief
- Initially strengthen with M>I, SLR, minisquat, light isotonic progressing to leg press, wall squat, lunges, step-ups and eccentric strengthening

Patellar Osteochondritis dissecans:

- Avoid resisted ROM through chondrosis or pain
- Quad strengthening M>I, SLR, minisquat, short arc progress to leg press, step-up, lunge
- Address malalignment
- Emphasize flexibility

**Phase I: 0- 2 weeks**

**ROM:** Restrictions limited by pain  
pain,  
Chondrosis or instability

**WB:** Restrictions limited by pain,  
pain,  
Chondrosis or instability

**MODALITIES:**

Cryotherapy 3x/day  
IFC  
NMES  
Phonophoresis  
Iontophoresis

**RX:** Recommendations:  
Orthotics/Proper footwear

footwear

Q, H,

RPMs

SLR,

Flexibility exercises: Q, H, G,  
ITB, TFL  
Bike: high seat, high RPMs, low  
resistance  
PF Mobs, if indicated  
PF taping or bracing, if indicated  
Biofeedback: QS, SLR, CKC  
TLS: 4 way hip  
hamstrings, gastrocs  
hamstrings,gastrocs  
Balance/Proprioception training  
Core Stability Training  
CV exercises  
UE exercises  
Functional exercises

**Phase II: 2-4 weeks**

**ROM:** Restrictions limited by pain,  
chondrosis or instability

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chondrosis or instability

**MODALITIES:**

Cryotherapy 3x/day  
IFC  
NMES  
Phonophoresis  
Iontophoresis

**RX:** Recommendations:  
Orthotics/Proper footwear

Flexibility exercises: Q, H, G,

ITB, TFL

Bike: high seat, high RPMs,

low resistance

PF Mobs, if indicated  
PF bracing or taping, if indicated

Biofeedback: QS, SLR, CKC

TLS: 4 way hip  
hamstrings, gastrocs

Balance/Proprioception training

Core Stability Training  
CV exercises  
UE exercises  
Functional exercises

**Phase III: 4-6 weeks**

**ROM:** Restrictions limited by  
chondrosis or instability

**ROM:** Restrictions limited by  
chondrosis or instability

**MODALITIES:**

Cryotherapy 3x/day  
IFC  
NMES  
Phonophoresis,  
Iontophoresis

**RX:** Recommendations:  
Orthotics/Proper

Flexibility exercises:

G, ITB, TFL

Bike: high seat, high

low resistance

PF Mobs, if indicated  
PF taping or bracing, if  
indicated

Biofeedback: QS,  
CKC

TLS: 4 way hip

Balance/Proprioception  
training

Core Stability Training  
CV exercises  
UE exercises  
Functional exercises