Rehabilitation.
From basic science and biomechanics to clinical practice.

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Disclosure: none.
Strength training in knee OA: no effect on KAM

8W Quadriceps training: no effect
Thorstensson 2007 OAC 1163

12 W Quadriceps strength training: no effect
Lim 2008 Arthritis Care Res 943

12 W Strength training of hips only relieves symptoms, not load
Bennell 2010 OAC 18:621-8
Movement or strength training?

Movement may be the key to better knees.

Leong 2010 Matrix Biology 420
May you take NSAIDs while exercising? 50-70 y, KOA, 12 w exercise, each group n=12

Petersen 2010 OAC 34-40
But glucosamine may be smarter

50-70 y, KOA, 12 w exercise, each group n=12

Petersen 2010 OAC 34-40
Pain in knee OA is related to inflammation.

80% with moderate pain have inflammation on MR.

MRI-Inflammation: 9.2 odds for pain.

Baker 2010 Ann Rheum Dis Sept 1779
Is exercise good or bad for cartilage?

Microdialysis study, KOA, +/- ex

- Anti-inflammatory IL-10 only in the exercise group
- Proinflammatory cytokines, IL-6 and IL-8 increase during the procedure

Helmark 2010 Arthritis Res Ther 12:R126
Treatment of inflammation prevents OA in experimental dog-model

Control 25% OA

Oral steroid, 8%

I.a. of steroid, 0%

8 weeks after section of ant. cruciate lig.

Pelletier 1989 Arthritis Rheum 181