

RUNNING WITH ARTHRITIS



DISCLAIMERS

- I have no financial interests to disclose
- I am a runner so there is some intrinsic bias

OBJECTIVES

- Discuss myths associated with osteoarthritis and running for fitness
- List the benefits of running and return to activity after total knee arthroplasty

TODAY'S ADGENDA

- Understand the factors which contribute to degenerative arthritis in the knee
- Understand how to manage arthritis and how this may impact your activity levels
- Understand how you or your patients can run with arthritis and after joint replacement



Does running
cause
arthritis?

Does running
accelerate
my arthritis?

Should I run
after knee
replacement?



PRIMARY CAUSES OF OSTEOARTHRITIS

Genetics

- 30-70% of risk
- Especially true for hands

Age

- 30% of adults aged 50+ have OA by Xray, 50% by age 65

Overweight

- Risk doubles for every 5 increase in BMI above 25
- 30 = 2x, 35 = 4x, 40 = 8x

Injury

- ACL, meniscus tears, intra-articular fractures

DOES RUNNING CAUSE ARTHRITIS?

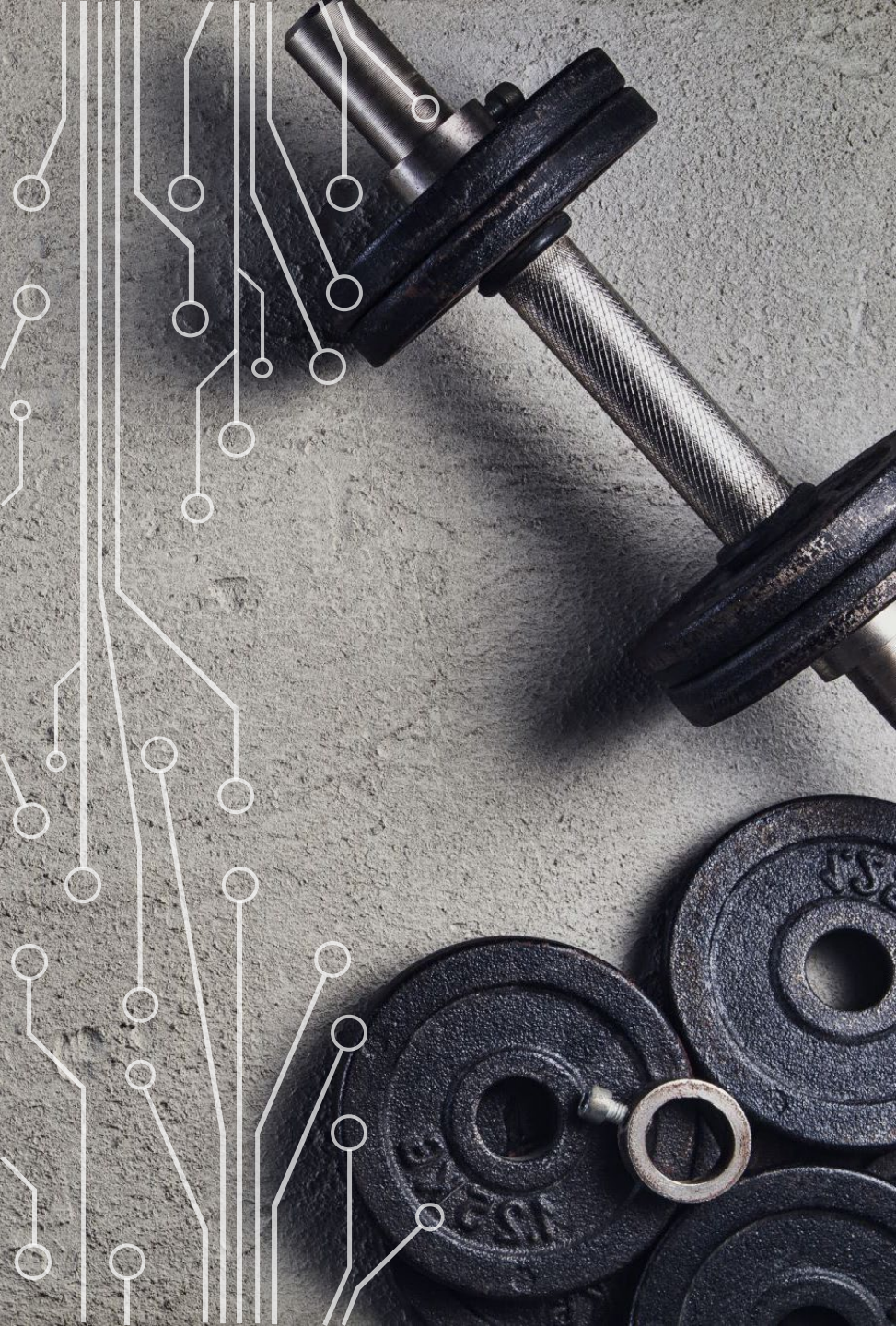
NOOOOO !

Long distance runners have a lower rate of OA than controls

- Chakraverty, et al, Am J Prev Med, 2008; 35: 133-138.
- Rogers et al; Osteoarthritis Cartilage; 2002; 10: 617-622.

Running, tennis and dancing (prolonged weightbearing activities) increase the articular cartilage volume

- Teichtahl, et al, Arthr Rheum, 2009; 61:1095-1102.



WHAT KIND OF EXERCISE IS ASSOCIATED WITH INCREASED RISK OF ARTHRITIS?

- HEAVY RESISTANCE WEIGHT TRAINING
- HEAVY WORK ACTIVITIES ASSOCIATED WITH SQUATTING
- Jensen, Occup Environ Health 2008; 65: 72-89
- ELITE LONG DISTANCE RUNNING (THRESHOLD EFFECT?)
- Newman DC, ACSM's Health and Fitness Journal 14: No. 1, 2010.

RISKS YOU CAN MANAGE

Blood sugar

- High BS stiffens cartilage
- High cholesterol stiffens cartilage

Weight control

Good shoes, replace often (every 3-4 months)

Control your pace and intensity

Consider off-loader bracing if arthritis is present

I HAVE ARTHRITIS. CAN I RUN?

Prior experience?

Weight control
ok?

Start slowly and
advance slowly

Stop if too much
pain or if swelling
develops

Ok to use
NSAIDs, topical
meds, ice, sleeve

Replace shoes
often, alternate
shoe wear (have
2-3 pairs)



I NEED A KNEE REPLACEMENT, CAN I KEEP RUNNING?

- If you can still run, you don't need a TKA
- But stay as active as possible before TKA
- Don't wait too long
- Start planning ahead



I HAVE A KNEE REPLACEMENT, CAN I RUN?

- Maybe
- Were you a runner before? Was it recent?
- Joint wear is due to use/stress, not time.
 - Is your BMI normal?
 - Watch your pace
 - Good shoes
 - Normal BMI with running is less stress than high BMI with ADLs

RESEARCH ON ACTIVITY AFTER TOTAL JOINTS

Some studies show lower revision rates in highly active patients



Biomechanical eval of older polyethylene revealed higher loads on poly with running



Newer poly is more resistant to wear (revision for poly wear is now less common)



Highly active patients typically have lower BMI



SUMMARY

- Running does not cause arthritis
- Running with arthritis is acceptable within certain parameters
- Don't wait too long for arthroplasty if your desire is to return to sports after arthroplasty
- There is insufficient evidence to restrict total knee or hip patients from reasonable high intensity activities if they desire

DEDICATION

