

RETURN TO SPORTS AFTER HIP ARTHROPLASTY

Do We All Agree?



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Thank You to the Organizers



JERUSALEM



LERNER SPORTS CENTER, HEBREW UNIVERSITY



JUST WHEN YOU THOUGHT IT
WAS SAFE TO RETURN YOUR
THA PATIENT BACK TO
SPORT.....

Outline

- ① 1. Questions
- ② 2. Literature Review
- ③ 3. What are the Issues/Problems?
- ④ 4. What do we Agree on?
- ⑤ 5. What is the Evidence?
- ⑥ 6. When to Return to Sport?
- ⑦ 7. What can we Add?
- ⑧ 8. Take Home Messages

1. Questions.....

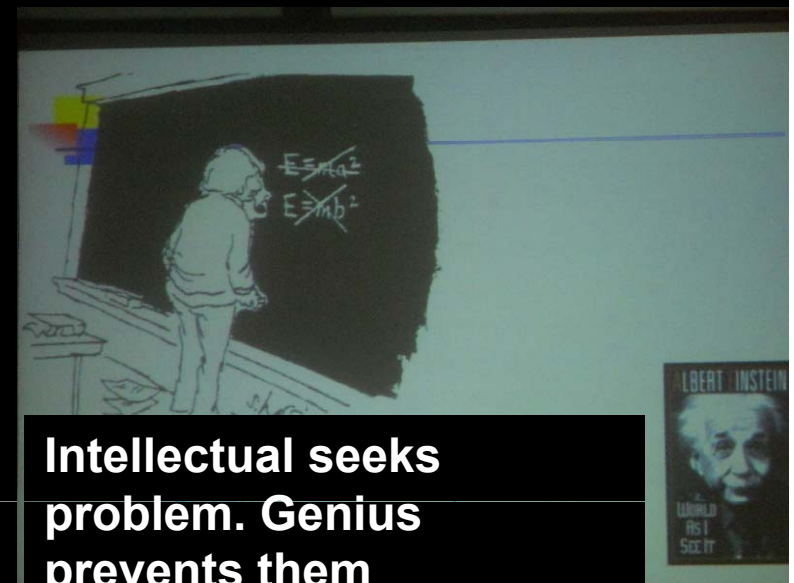
How many of you Advise :

- ⦿ No sports at all?
- ⦿ High impact *vs.* Low-impact
- ⦿ Time to return – 3, 6, 9, 12 months?

2.Literature Review

Articles
Excluded
(n=2)

- ❖ Case series, surveys, literature review, three consensus papers (Level 4-5 evidence)
- ⦿ **No prospective RCT** (level 1 evidence) that delineates guidelines for safe and appropriate activities



3. What are the Issues/Problems?

- Demand expected to **double** over the next **10-15 years**
- Trend of joint replacement has begun to **include the younger** as well as the older still active individual

Younger patients considering joint-replacement surgery earlier in life due to **advances in surgery & devices**

Lahav A, 2012



Studies Difficult to Perform as:

- Variability in surgeon's surgical techniques:

ALTHOUGH.....

- Type of operation and implant characteristics **did not predict** return to high activity sports
- Williams DH et al, 2012

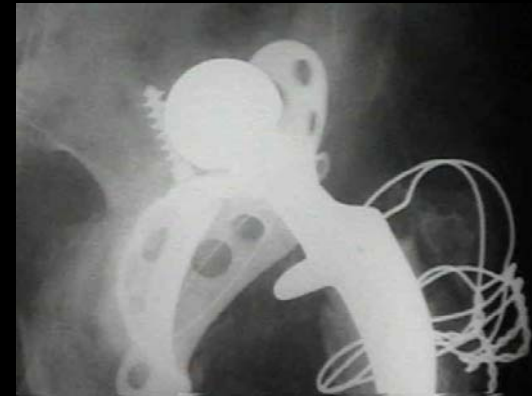
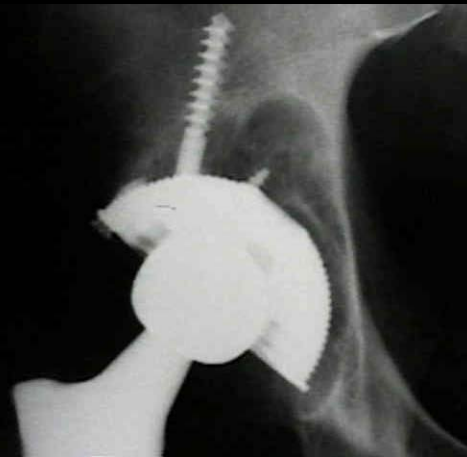
Preoperative UCLA Activity Score :

Age, male sex, and BMI - predicted
post-surgery **high activity scores**

Williams DH et al, 2012

4. There seems to be agreement that.....

1. Purpose of total hip replacement
= pain relief
≠ not to make better athletes!
2. Component wear, instability, loosening, & fracture of prosthetic metal-polyethylene bearing directly related to level of patient activity



3. Logical to advise against long-term participation in activities with repeated movements



○ Guidelines for many activities changed since the 1999 Hip Society Survey by Healy et al.

○ Activities now allowed:

- Speed Walking
- Stationary Skiing
- Dancing
- Rowing
- Downhill Skiing
- Weight Machines
- Weightlifting
- Ice skating
- Rollerblading
- Road Cycling
- Low-Impact Aerobics

(Clifford and Mallon, 2005, [Schmidutz F, 2012](#))



We Must Be Careful...

- ⦿ These changes = improved confidence in today's surgical techniques?

OR

- ⦿ **Realization of current patient expectations & compliance?**

6. When to return to sport?

- **71% Hip society & 60% AAHKS recommended return to activities 3-6 months postoperatively**



**WOULD YOU PUT YOUR THA
PATIENTS IN THE SAFE HANDS
OF THIS PHYSIOTHERAPIST.....**

But, We Also Know How to Save the Day.....

6. What can we add?

Archives of Physical Medicine and Rehabilitation

Referent Weight-bearing Values and Distribution Patterns in Walking, Ground, Treadmill and Elliptical Jogging: An Original Research Study.

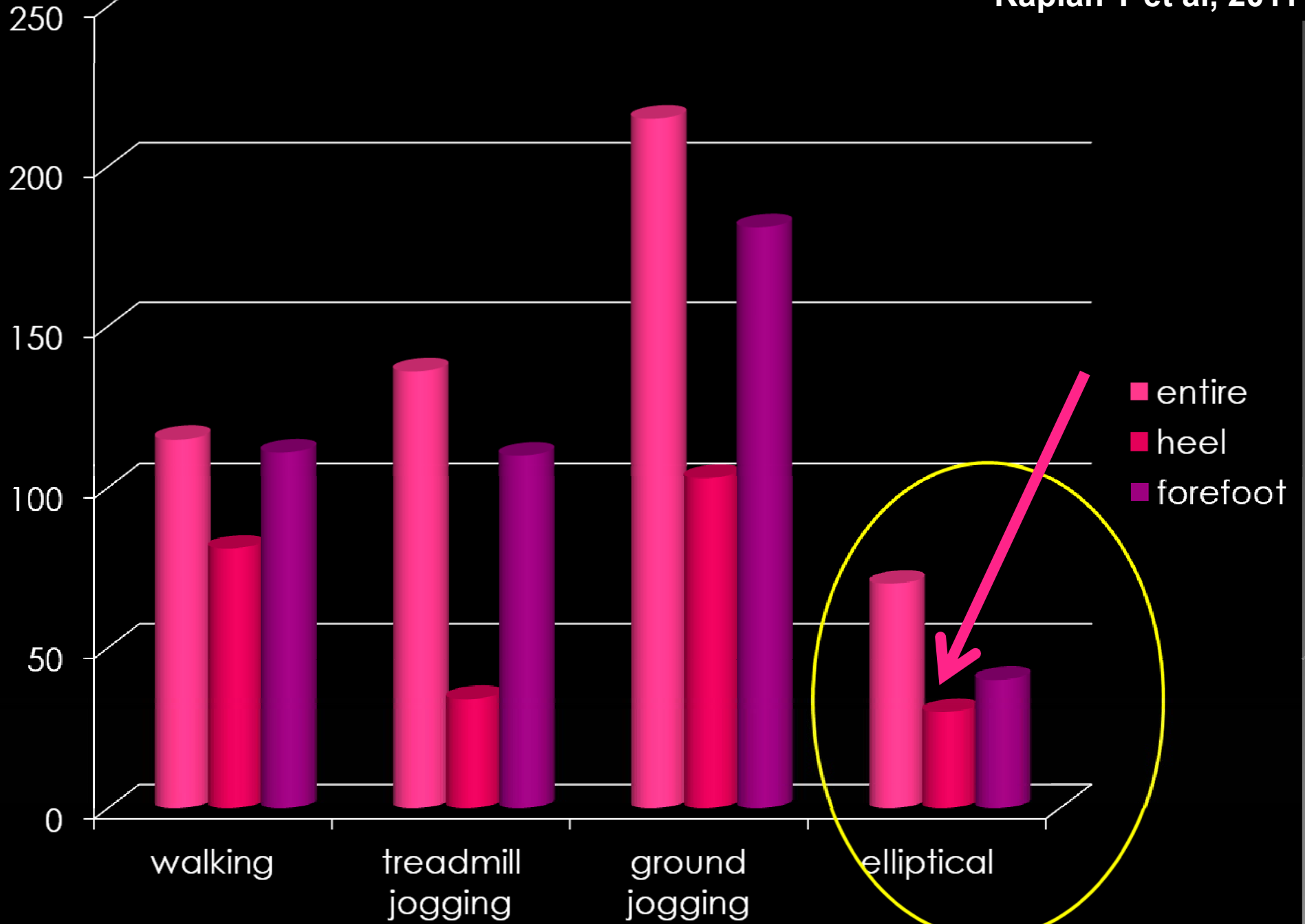
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In Summary

1. Each sport evaluated on potential risk to joint replacement

- Whether from force of repetitive injury
- Or possibility of catastrophic failure



2. Advisable to use techniques, biomaterials, and implants that will maximize an athlete's chance of success over time



3. Patients should be encouraged to be active after TJA, and this may include participation in athletic activity.

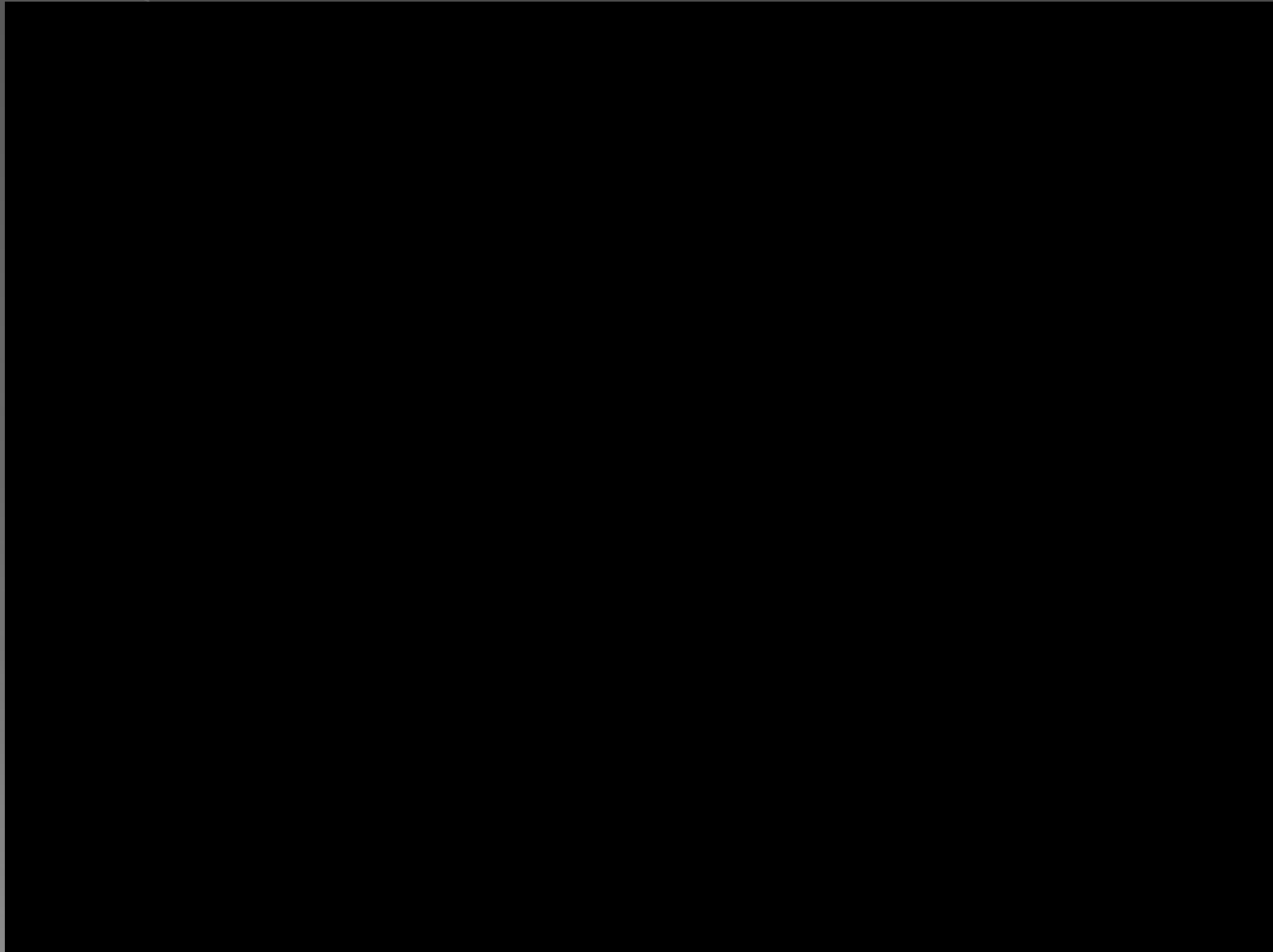
But Not All...

4. Patient & surgeon consider patient's general health, previous athletic experience, surgical approach, implant characteristics, & demands of particular sport

5. Well designed, long-term prospective, RCTs involving different levels of high activity and their impact on THA



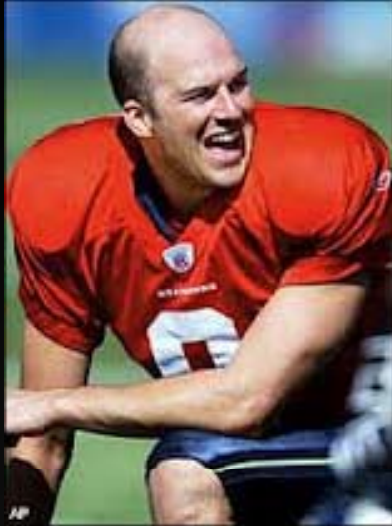
This can Sometimes be a Little Frustrating.....



Maimonides (1135-1204)

Wrote 900 Years Ago.....





**“The most
beneficial sporting
activity, is the one
that leads to.....**

- HAPPINESS”

(Chapters of Moses, Article 18, Pg. 218)



FOR FURTHER DETAILS



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THANK YOU

חנודה שמח