

Sport e Protesi

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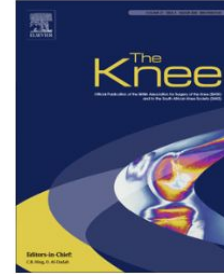




Contents lists available at [ScienceDirect](#)

The Knee

journal homepage:



Review

A high physical activity level after total knee arthroplasty does not increase the risk of revision surgery during the first twelve years: A systematic review with meta-analysis and GRADE



A. Kornuijt ^{a,b,c,*}, P.P.F.M. Kuijer ^c, R.A. van Drumpt ^a, M. Siebelt ^a, A.F. Lenssen ^d,
W. van der Weegen ^a

During the first 12 years after TKA, there is no increased risk for revision surgery for patients with a high activity level



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The Journal of Arthroplasty

journal homepage: www.arthroplastyjournal.org



Higher Activity Level Following Total Knee Arthroplasty Is Not Deleterious to Mid-Term Implant Survivorship

David A. Crawford, MD ^{a,*}, Joanne B. Adams, BFA, CMI ^a, Gerald R. Hobbs, PhD ^b,
Keith R. Berend, MD ^{a,c}, Adolph V. Lombardi Jr., MD, FACS ^{a,c,d}

Highly active patients had increased survivorship at 11 year
Activity level may not need to be limited with modern
implants

University of California Los Angeles Activity Scale

| Level | Description |
|-------|--------------------------------------------------------------------------------------------------------------------------|
| 1 | Wholly inactive, dependent on others, and cannot leave residence |
| 2 | Mostly inactive or restricted to minimum activities of daily living |
| 3 | Sometimes participates in mild activities, such as walking, limited housework, and limited shopping |
| 4 | Regularly participates in mild activities |
| 5 | Sometimes participates in moderate activities such as swimming or could do unlimited housework or shopping |
| 6 | Regularly participates in moderate activities |
| 7 | Regularly participates in active events such as bicycling |
| 8 | Regularly participates in active events, such as golf or bowling |
| 9 | Sometimes participates in impact sports such as jogging, tennis, skiing, acrobatics, ballet, heavy labor, or backpacking |
| 10 | Regularly participates in impact sports |

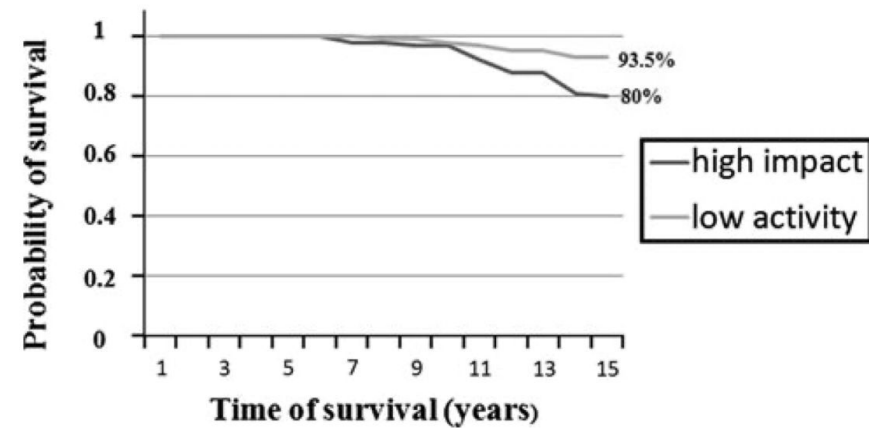
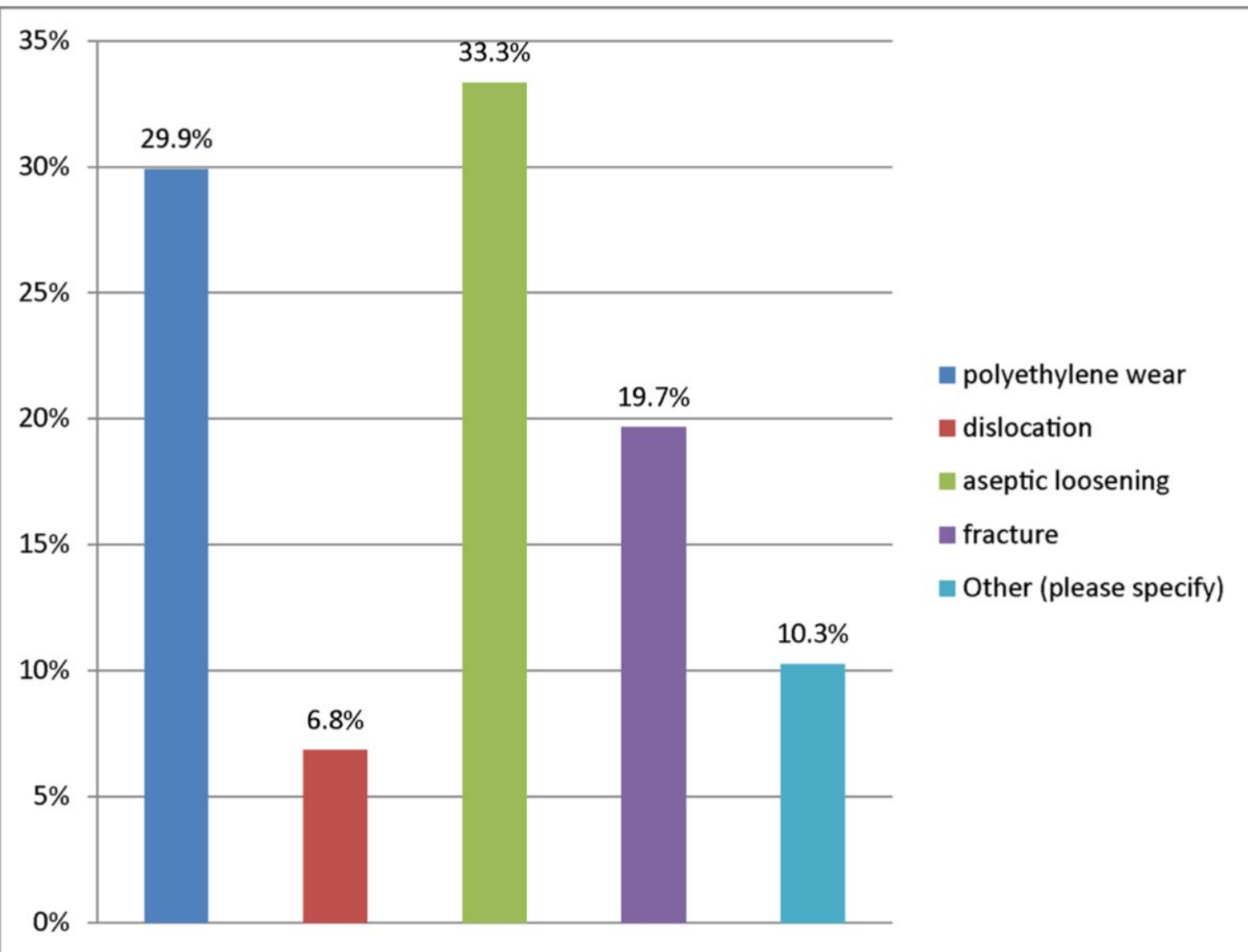
TABLE I Results of the Hip Society Survey*⁴⁵

| Allowed | | Allowed with Experience | | No Consensus | | Not Recommended | | | | |
|--------------------|------|-------------------------|----------------------|--------------|----------------|--------------------|------------|--------------------|----------------|---|
| 1999 | 2005 | 1999 | 2005 | 1999 | 2005 | 1999 | 2005 | | | |
| Stationary cycling | √ | √ | Bowling | √ | Square dancing | √ | Baseball | √ | | |
| Ballroom dancing | √ | √ | Canoeing | √ | Fencing | √ | √ | Basketball | √ | √ |
| Golf | √ | √ | Road cycling | √ | Rowing | √ | Football | √ | √ | |
| Shuffleboard | √ | √ | Hiking | √ | Ice skating | √ | Gymnastics | √ | | |
| Swimming | √ | √ | Horseback riding | √ | √ | Roller skating | √ | Handball | √ | |
| Doubles tennis | √ | | Cross-country skiing | √ | √ | Downhill skiing | √ | Hockey | √ | |
| Normal walking | √ | √ | Rowing | | √ | Stationary skiing | √ | Jogging | √ | √ |
| Bowling | | √ | Ice skating | | √ | Speed walking | √ | Rock climbing | √ | |
| Canoeing | | √ | Roller skating | | √ | Weight lifting | √ | Soccer | √ | √ |
| Road cycling | | √ | Downhill skiing | | √ | Weight machine | √ | Squash/racquetball | √ | |
| Square dancing | | √ | Stationary skiing | | √ | Baseball | | √ | Singles tennis | √ |
| Hiking | | √ | Doubles tennis | | √ | Gymnastics | | √ | Volleyball | √ |
| Speed walking | | √ | Weight lifting | | √ | Handball | | √ | | |
| | | | Weight machine | | √ | Hockey | | √ | | |
| | | | | | | Rock climbing | | √ | | |
| | | | | | | Squash/racquetball | | √ | | |
| | | | | | | Singles tennis | | √ | | |
| | | | | | | Volleyball | | √ | | |

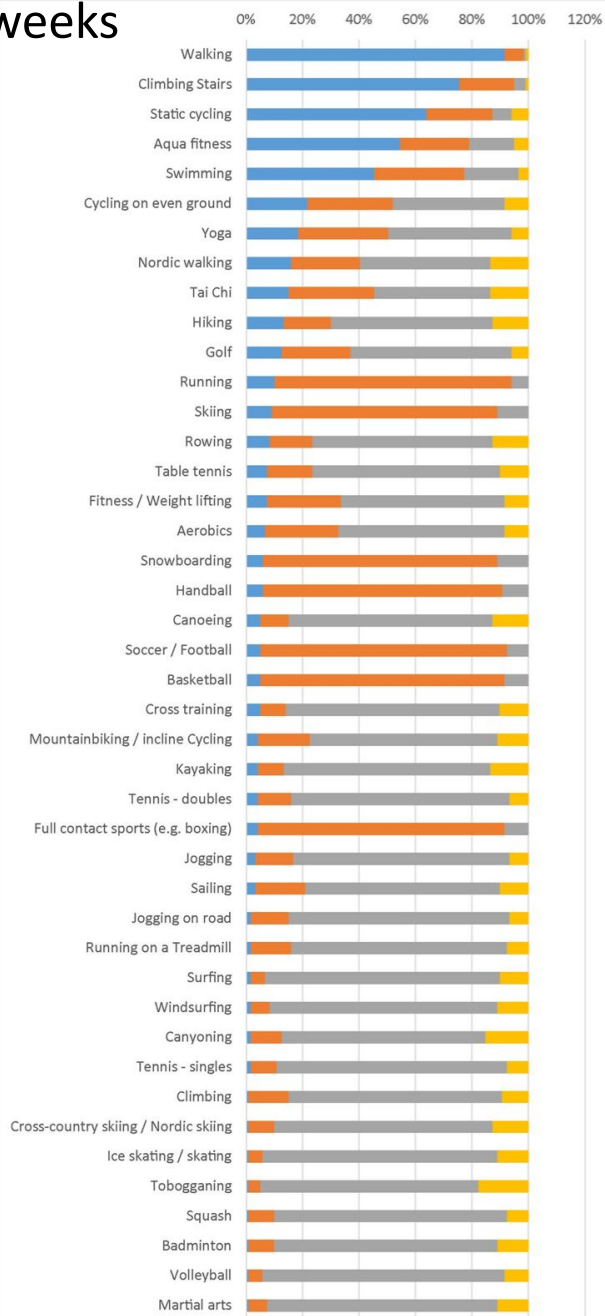
TABLE II Results of the Knee Society Survey*⁴⁵

| Allowed | | Allowed with Experience | | No Consensus | | Not Recommended | | | | | |
|--------------------|------|-------------------------|----------------------|--------------|----------------|--------------------|----------|------------|--------------------|---|---|
| 1999 | 2005 | 1999 | 2005 | 1999 | 2005 | 1999 | 2005 | | | | |
| Bowling | √ | √ | Canoeing | √ | Square dancing | √ | Baseball | √ | | | |
| Stationary cycling | √ | √ | Road cycling | √ | Fencing | √ | √ | Basketball | √ | √ | |
| Ballroom dancing | √ | √ | Hiking | √ | Roller skating | √ | √ | Football | √ | √ | |
| Golf | √ | √ | Rowing | √ | √ | Downhill skiing | √ | Gymnastics | √ | | |
| Horseback riding | √ | | Ice skating | √ | √ | Weight lifting | √ | √ | Handball | √ | |
| Shuffleboard | √ | √ | Cross-country skiing | √ | √ | Baseball | | √ | Hockey | √ | |
| Swimming | √ | √ | Stationary skiing | √ | √ | Gymnastics | | √ | Jogging | √ | √ |
| Normal walking | √ | √ | Doubles tennis | √ | √ | Handball | | √ | Rock climbing | √ | |
| Canoeing | | √ | Speed walking | √ | | Hockey | | √ | Soccer | √ | √ |
| Road cycling | | √ | Weight Machine | √ | | Rock climbing | | √ | Squash/racquetball | √ | |
| Square dancing | | √ | Horseback riding | | √ | Squash/racquetball | | √ | Singles tennis | √ | |
| Hiking | | √ | Downhill skiing | | √ | Singles tennis | | √ | Volleyball | √ | √ |
| Speed walking | | √ | | | | Weight machine | | √ | | | |

Rischi teorici per chirurghi Europei dati da attività sportiva

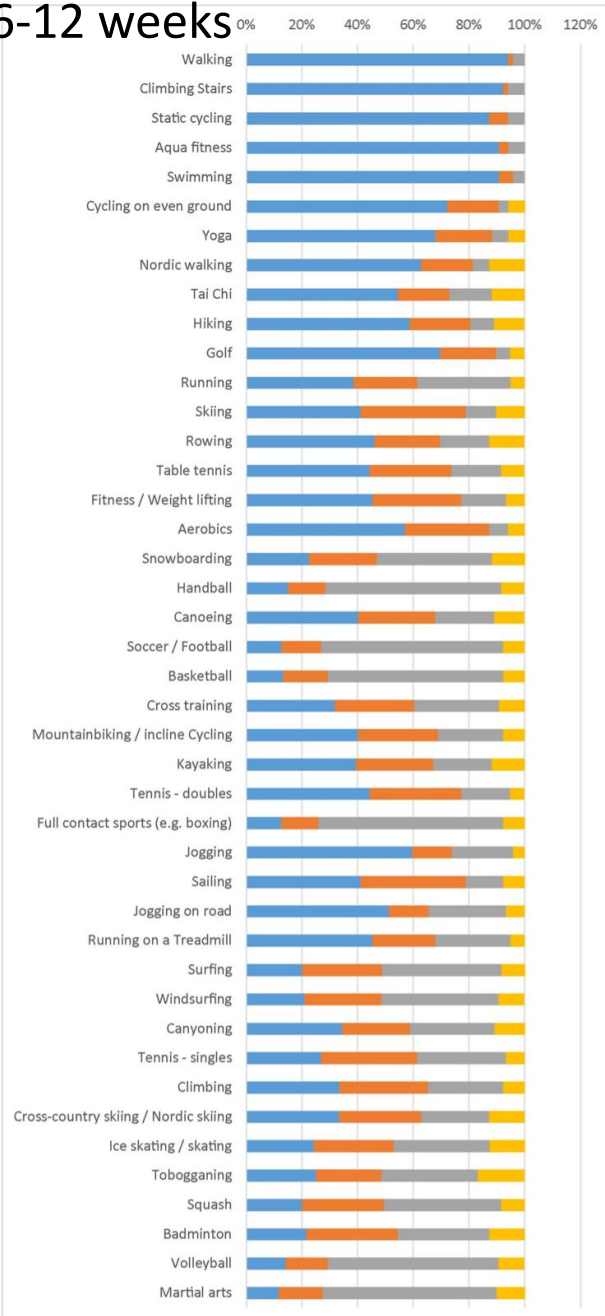


6 weeks



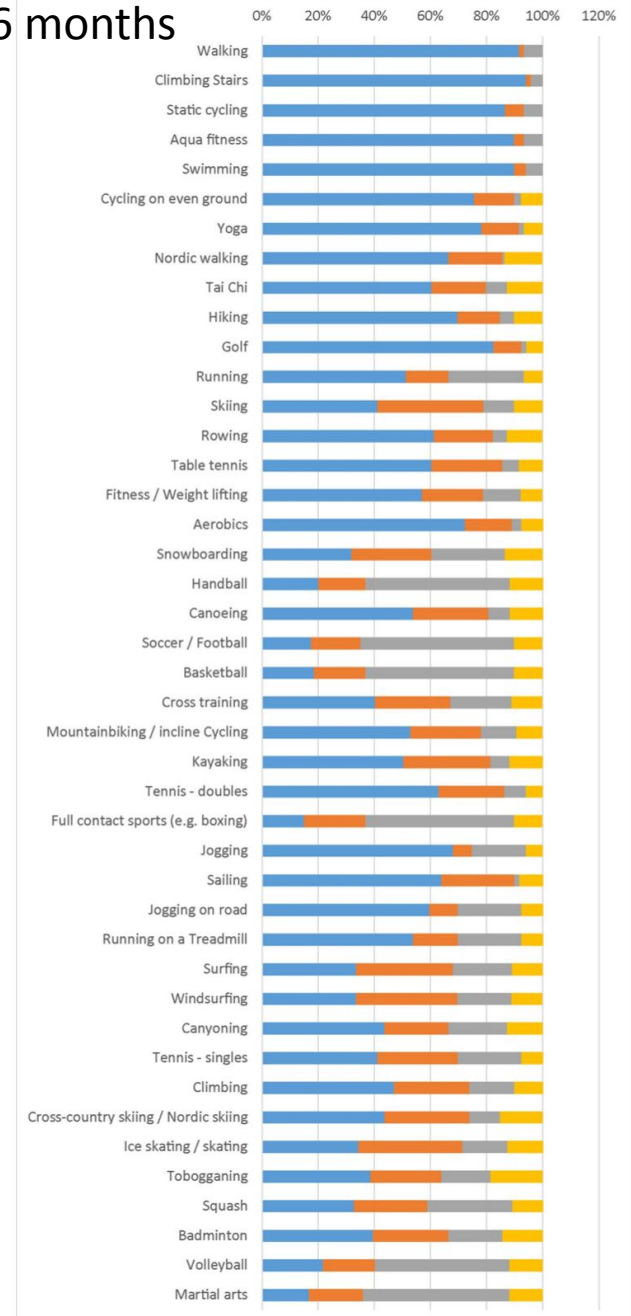
■ allowed
■ allowed when experienced
■ not allowed
■ no option given at different follow-ups

6-12 weeks



■ allowed
■ allowed when experienced
■ not allowed
■ no option given at different follow-ups

6 months



■ allowed
■ allowed when experienced
■ not allowed
■ no option given at different follow-ups

Table 2. Sport advice after TKA.

| Sport | TKA < 65 years | TKA > 65 years |
|-------------------------------|-------------------------|-------------------------|
| Aerobics | Allowed with experience | Allowed with experience |
| Aqua fitness | Allowed | Allowed |
| Badminton | No advice | No advice |
| Basketball | Discouraged | Discouraged |
| Bicycling | Allowed | Allowed |
| Canoeing | Allowed with experience | Allowed with experience |
| Cross-country skiing | Allowed with experience | Allowed with experience |
| Cross-walking | No advice | Allowed with experience |
| Cycling | Allowed with experience | Allowed with experience |
| Dancing | Allowed | Allowed |
| Fitness | Allowed | Allowed |
| Football—field | Discouraged | Discouraged |
| Football—hall | Discouraged | Discouraged |
| Fysiofitness | Allowed | Allowed |
| Golf | Allowed | Allowed |
| Gymnastics | No advice | No advice |
| Handball | Discouraged | Discouraged |
| Hockey | Discouraged | Discouraged |
| Ice skating | Allowed with experience | Allowed with experience |
| Jeu de boules (game of bowls) | Allowed | Allowed |
| Koersbal (bowls) | No advice | No advice |
| Korfbal (korf ball) | Discouraged | Discouraged |
| Martial arts | Discouraged | Discouraged |
| Nordic walking | Allowed | Allowed |
| Horseback riding | Allowed with experience | Allowed with experience |
| Rowing | Allowed | Allowed with experience |
| Running | Discouraged | Discouraged |
| Running on a treadmill | Discouraged | No advice |
| Sailing | Allowed with experience | Allowed with experience |
| Skiing | No advice | No advice |
| Snowboarding | Discouraged | Discouraged |
| Squash | No advice | No advice |
| Surfing | Allowed with experience | No advice |
| Swimming | Allowed | Allowed |
| Table tennis | Allowed with experience | Allowed with experience |
| Tennis—singles | No advice | No advice |
| Tennis—doubles | Allowed with experience | Allowed with experience |
| Volleyball | Discouraged | Discouraged |
| Walking | Allowed | Allowed |
| Yoga/Tai-chi | Allowed with experience | Allowed with experience |

Table 1. Sport advice after THA.

| Sport | THA < 65 years | THA > 65 years |
|-------------------------------|-------------------------|-------------------------|
| Aerobics | Allowed with experience | Allowed with experience |
| Aqua fitness | Allowed | Allowed |
| Badminton | No advice | No advice |
| Basketball | Discouraged | Discouraged |
| Bicycling | Allowed | Allowed |
| Canoeing | Allowed with experience | Allowed with experience |
| Cross-country skiing | Allowed with experience | Allowed with experience |
| Cross-walking | No advice | No advice |
| Cycling | Allowed with experience | Allowed with experience |
| Dancing | Allowed | Allowed |
| Fitness | Allowed | Allowed |
| Football—field | Discouraged | Discouraged |
| Football—hall | Discouraged | Discouraged |
| Fysiofitness | Allowed | Allowed |
| Golf | Allowed | Allowed |
| Gymnastics | No advice | No advice |
| Handball | Discouraged | Discouraged |
| Hockey | No advice | Discouraged |
| Ice skating | Allowed with experience | Allowed with experience |
| Jeu de boules (game of bowls) | Allowed | Allowed |
| Koersbal (bowls) | No advice | No advice |
| Korfbal (korf ball) | Discouraged | Discouraged |
| Martial arts | Discouraged | Discouraged |
| Nordic walking | Allowed | Allowed |
| Horseback riding | Allowed with experience | Allowed with experience |
| Rowing | Allowed with experience | Allowed with experience |
| Running | No advice | No advice |
| Running on a treadmill | No advice | No advice |
| Sailing | Allowed with experience | Allowed with experience |
| Skiing | Allowed with experience | No advice |
| Snowboarding | No advice | Discouraged |
| Squash | No advice | No advice |
| Surfing | No advice | No advice |
| Swimming | Allowed | Allowed |
| Table tennis | Allowed with experience | Allowed with experience |
| Tennis—singles | Allowed with experience | No advice |
| Tennis—doubles | Allowed with experience | Allowed with experience |
| Volleyball | No advice | Discouraged |
| Walking | Allowed | Allowed |
| Yoga/Tai-chi | Allowed with experience | Allowed with experience |

Sports Activity after Total Hip and Knee Arthroplasty

Specific Recommendations Concerning Tennis

*Thorsten M. Seyler, Michael A. Mont, Phillip S. Ragland, Munaf M. Kachwala and
Ronald E. Delanois*

Various studies assessing the association between clinical outcome and participation in tennis did not demonstrate a harmful effect.

Return to Sports and Physical Activity After Total and Unicondylar Knee Arthroplasty: A Systematic Review and Meta-Analysis

Suzanne Witjes^{1,2} · Vincent Gouttebauge² · P. Paul F. M. Kuijer³ ·
Rutger C. I. van Geenen¹ · Rudolf W. Poolman⁴ · Gino M. M. J. Kerkhoffs²



Low and high impact sports after TKA and UKA are possible.

More patients return to sport after UKA than after TKA.

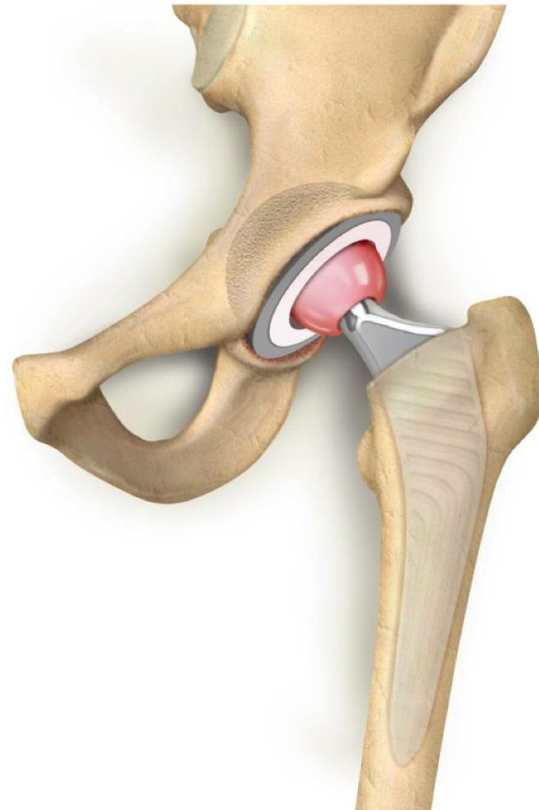


Systematic Review

Resurfacing Hip Arthroplasty Is a Safe and Effective Alternative to Total Hip Arthroplasty in Young Patients: A Systematic Review and Meta-Analysis

Michele Palazzuolo ^{1,†}, Alessandro Bensa ^{2,*,†}, Stefan Bauer ^{3,4}, William G. Blakeney ⁴, Giuseppe Filardo ^{2,5} and Martin Riegger ^{2,5} 

THA



RHA

