

Total hoftealloplastik operation i Danmark - forekomst, risikofaktorer og prognose

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Agenda

1. Incidence of total hip arthroplasties (THA);
2. Risk factors, including age, gender and diagnosis;
3. Prognose:
 - Implant survival
 - Venous thromboembolism
 - Mortality

Fokus: Osteoarthritis (OA) vs. Reumatoid arthritis (RA)

Dansk Hoftealloplastik Register (DHR)

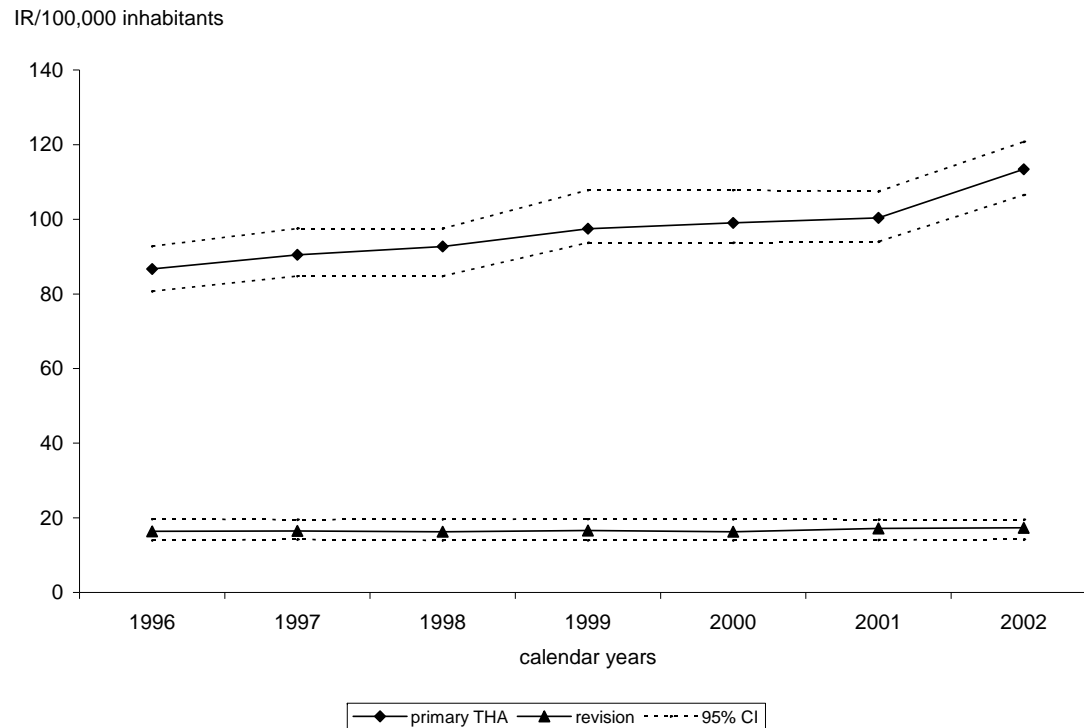
- Landsdækkende kvalitetsdatabase etableret i 1995
- Pre-, per- og postoperative data vedrørende primære THA og revisioner registreres prospektivt.
- En del af Den Ortopædiske Fællesdatabase
- Dækningsgrad: over 90%
- Kompletthedsgrad: over 90%
- Årsrapporter
- www.dhr.dk

Data sources and possibilities of record linkage



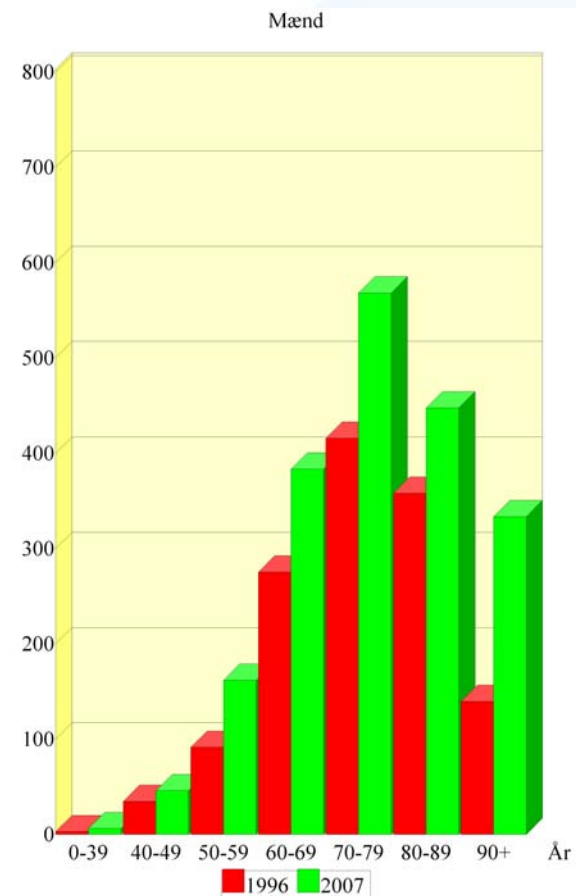
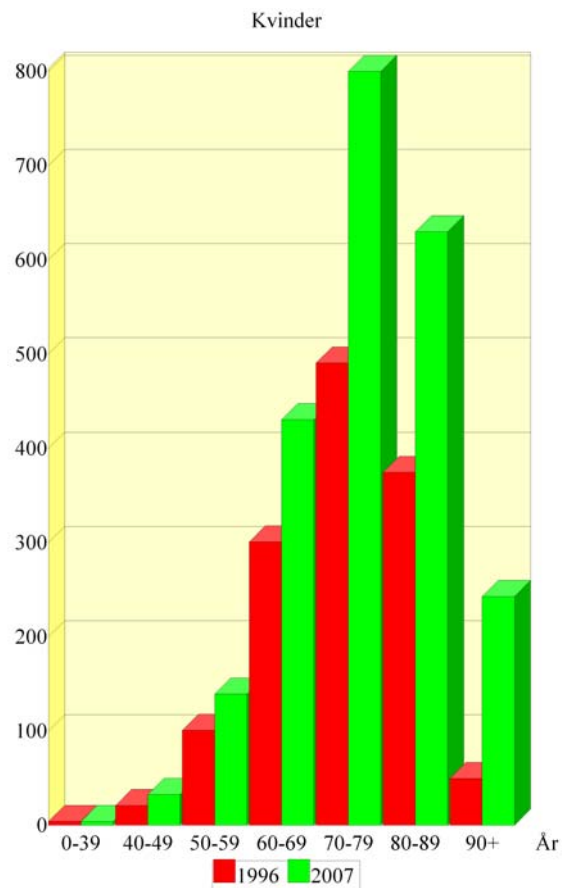
Incidence of THA, overall

- The annual number of THA in Denmark is more than 8500, including ca. 15% revisions.



Acta Orthop 2005; 76(2): 182-189.

Incidence of THA, gender and age



Incidence of THA, hip diagnoses

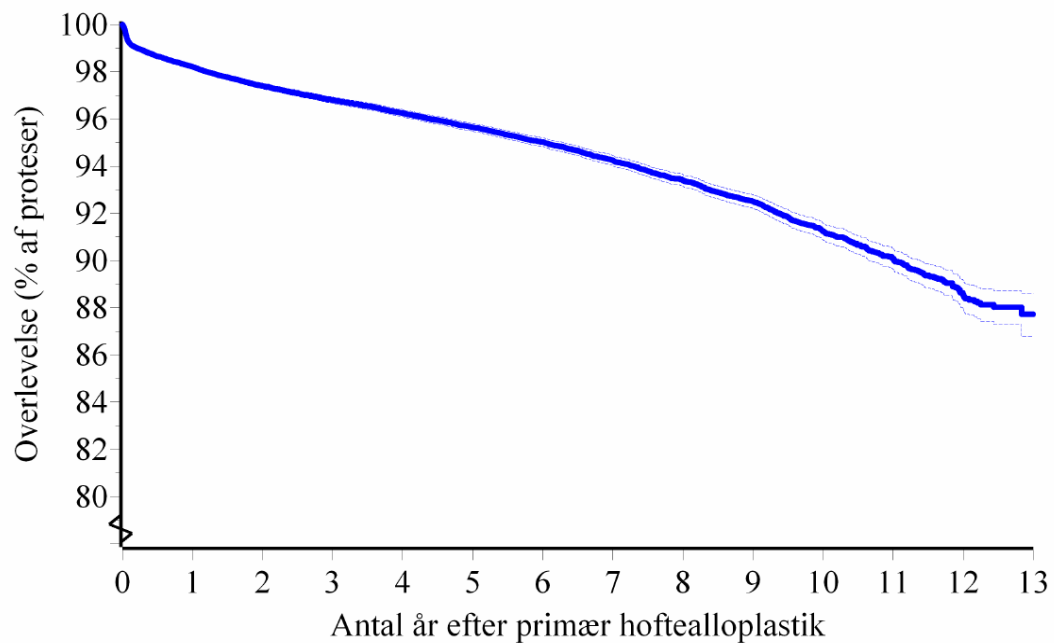
Table 3. Estimates of incidence rates and incidence rate ratios of THA between 1996 and 2002 according to diagnosis in patients undergoing primary operation (Poisson regression)

Diagnosis	IR ^a		IRR ^b and 95% CI 1996–2002	
	1996	2002		
Primary arthrosis	65.6	89.8	1.4	1.3–1.4
Rheumatoid arthritis	3.1	2.1	0.7	0.6–0.9
Atraumatic necrosis of femoral head	2.7	2.9	1.1	0.9–1.4
Late sequelae from fracture of proximal femur	8.5	9.7	1.1	1.0–1.3
Hip disorders in childhood	2.9	3.9	1.3	1.1–1.6

Acta Orthop 2005; 76(2): 182-189.

Implant survival – all THA

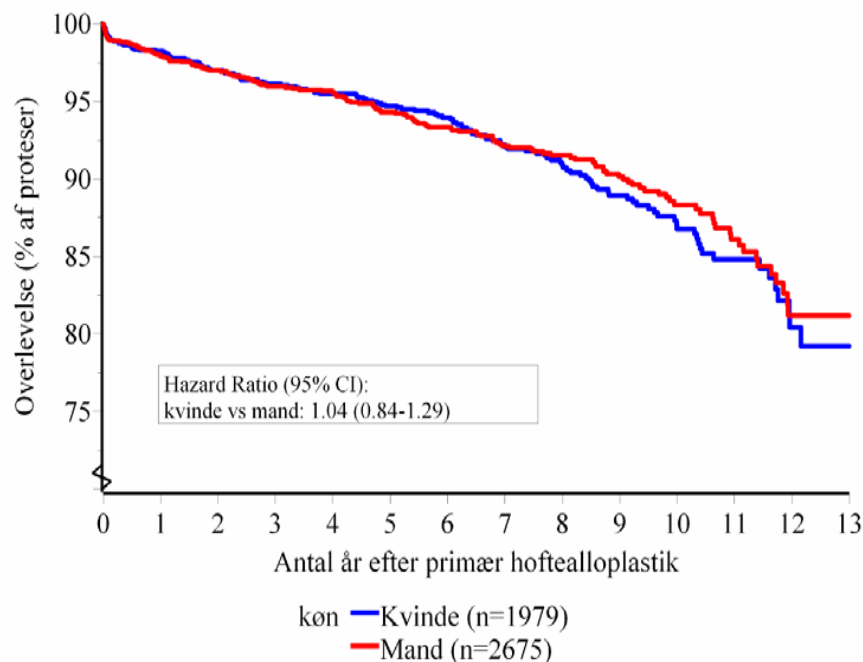
Overlevelse alle primæroperationer
Endepunkt: 1. gangs revision alle årsager
Estimeret overlevelse med 95% sikkerhedsinterval
(n= 77171)



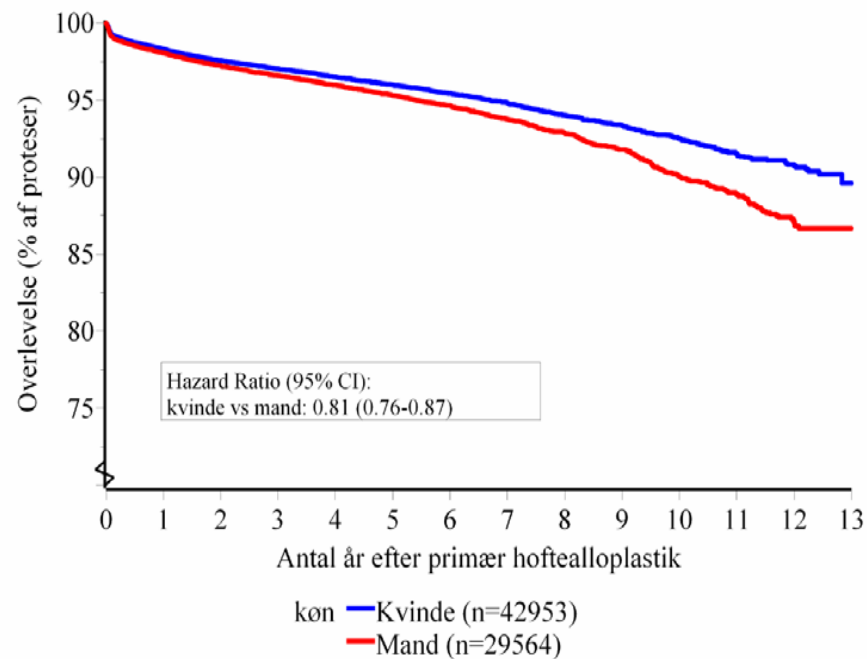
DHR Årsrapport 2008

Implant survival – all THA, gender

Alle <50 år, opdelt efter køn
 Endepunkt: 1. gangs revision alle årsager
 (n= 4654)



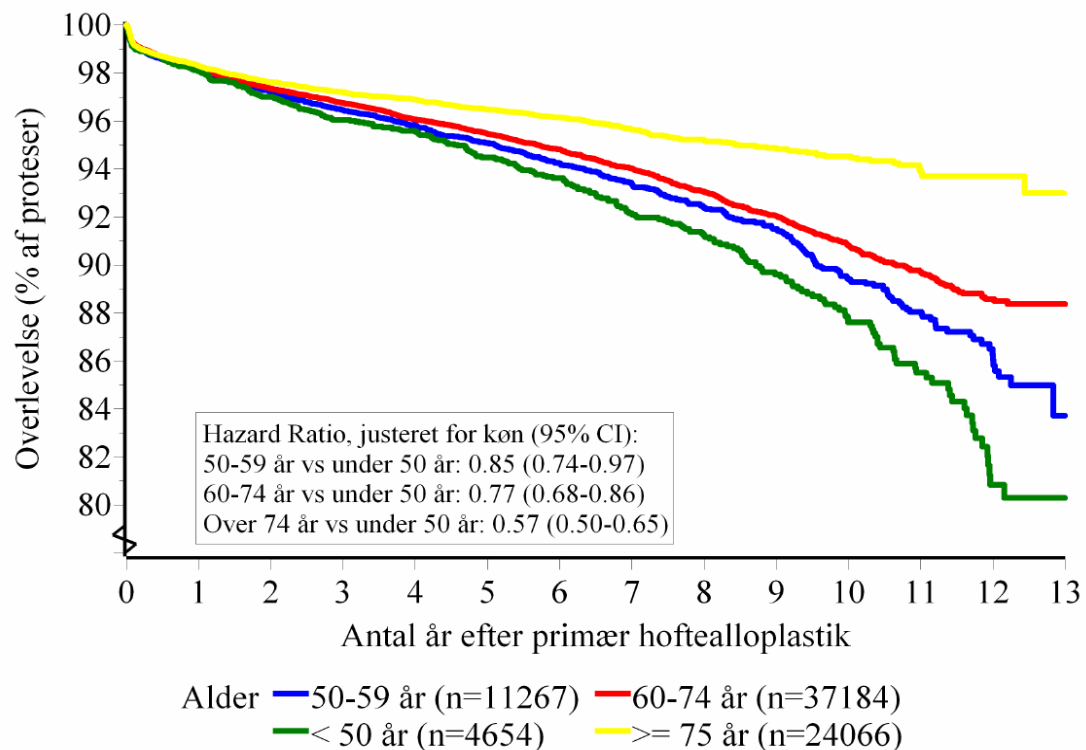
Alle =>50 år, opdelt efter køn
 Endepunkt: 1. gangs revision alle årsager
 (n= 72517)



DHR Årsrapport 2008

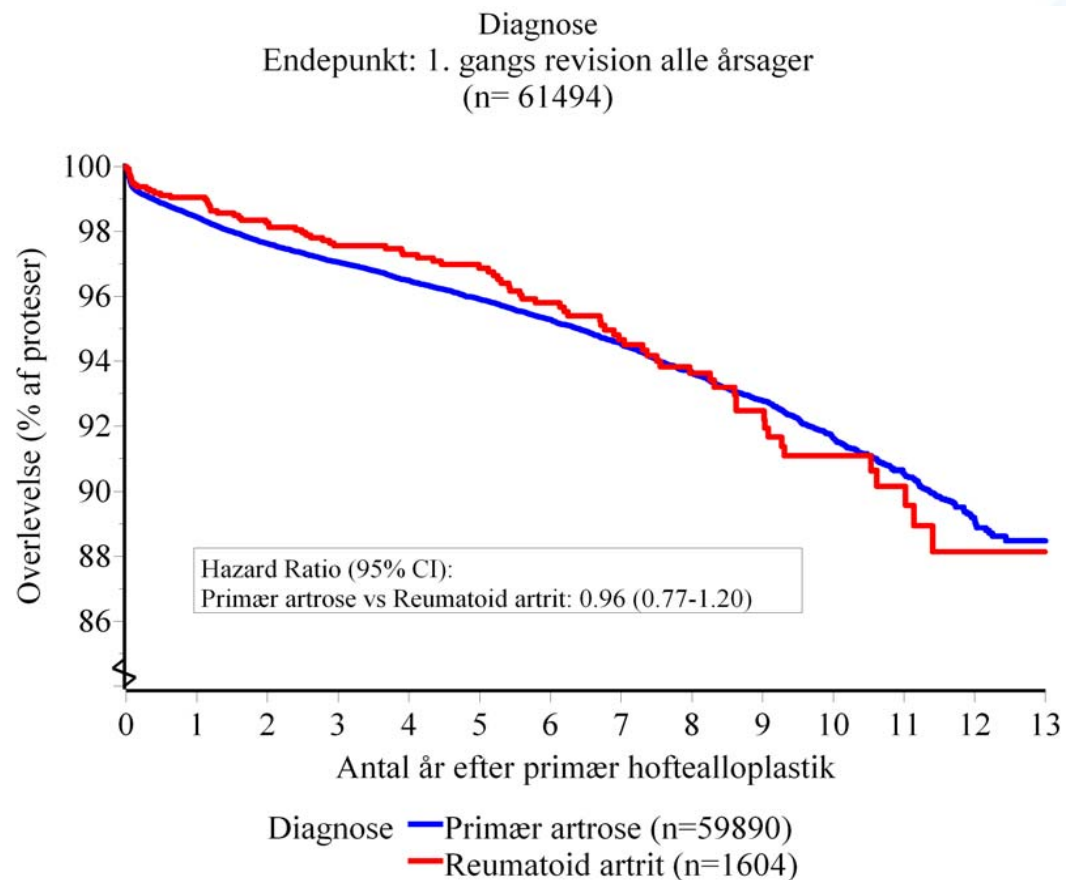
Implant survival – all THA, age

Overlevelse alle primæroperationer, opdelt efter alder
Endepunkt: 1. gangs revision alle årsager
(n= 77171)



DHR Årsrapport 2008

Implant survival – all THA, diagnoses



DHR Årsrapport 2008



Risk for VTE after THA in Denmark

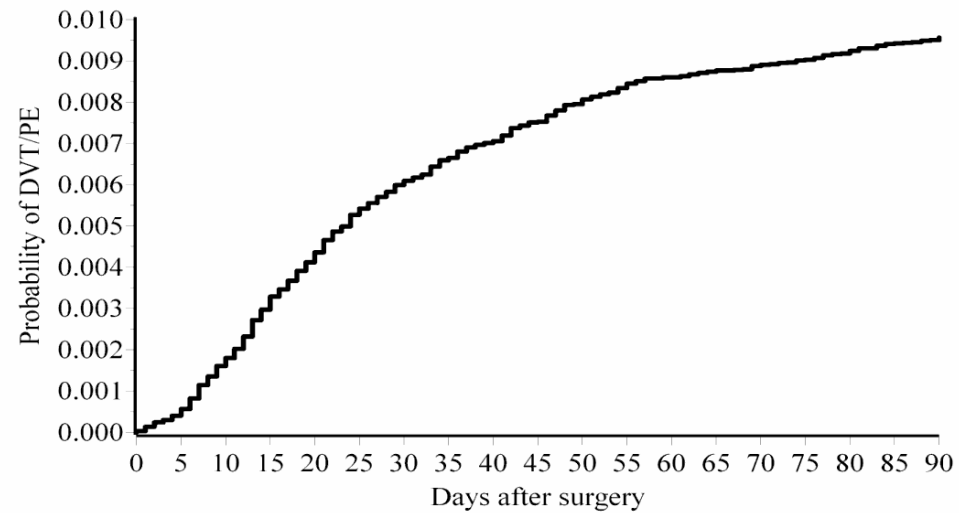
- Incidence of VTE within 90 days after **primary THA** was **1.0%** despite the fact that all patients received some kind of pharmacological thromboprophylaxis;
- Only **15%** of the patients were admitted to orthopedic departments, whereas **85%** were admitted to other departments, mainly departments of general internal medicine.

Pedersen AB et al. in review





Risk for VTE after THA *versus* time



Pedersen AB et al. in draft

Survival rate after VTE

Time	VTE	PE±DVT
7 days	75%	59%
30 days	72%	56%
1 year	64%	48%

Heit JA et al. Arch Intern Med. 1999

Risk for VTE after THA

	VTE %	Relativ Risk* (95% CI)
Rheumatoid arthritis vs. Osteoarthritis	0.54 vs. 1.03	0.48 (0.25 -0.91)

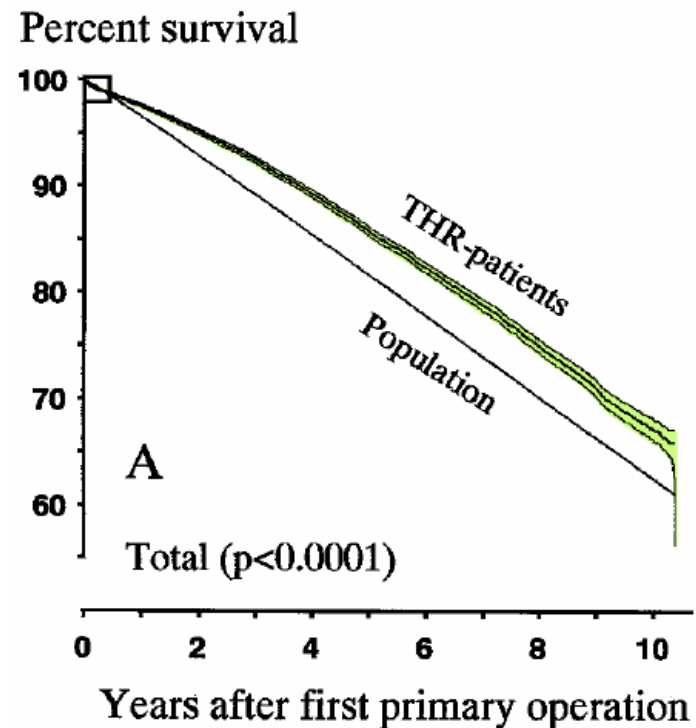
* Relativ risk adjusted for age, gender, Charlson comorbidity index, year of surgery, type of thromboprophylaxis

Pedersen AB et al. in draft

Mortality after THA

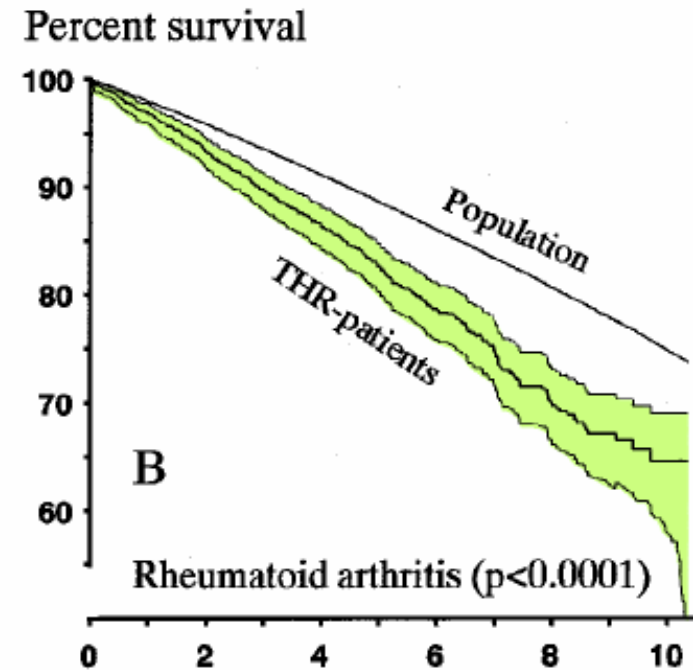
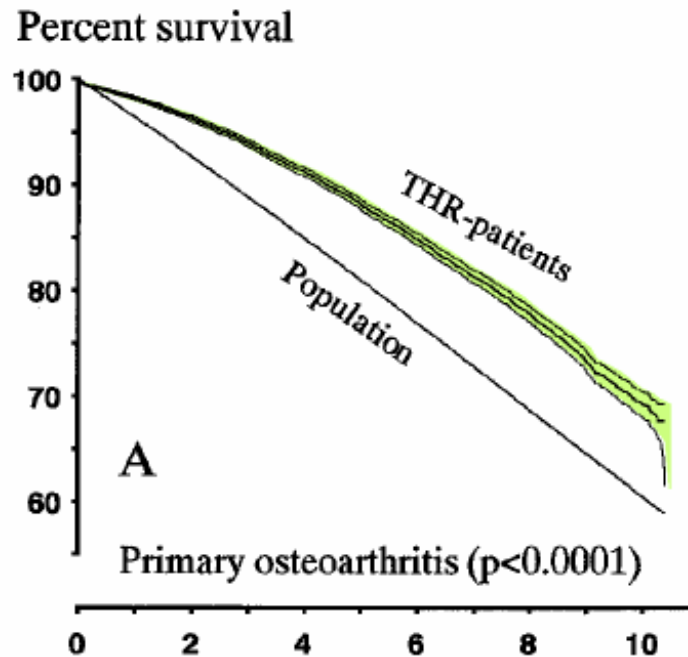
Mortality after THA

- 20% lower mortality in patients with THA than in the general population (after 8 years)



Acta Orthop 2000; 71 (1): 19-27.

Mortality after THA



Acta Orthop 2000; 71 (1): 19-27.

Mortality after THA in Denmark

	0-90 days	90 days- 12.7 years
	MRR adjusted (THR vs. general population) (95% CI)	MRR adjusted (THR vs. general population) (95% CI)
All subjects	1.3 (1.1-1.4)	0.8 (0.8-0.9)
Osteoarthritis	0.8 (0.7-0.9)	0.7 (0.7-0.7)
Femoral neck fracture	2.3 (2.0-2.7)	1.3 (1.2-1.4)
Rheumatoid arthritis	0.6 (0.3-1.2)	1.1 (0.9-1.2)
Congenital hip diseases	0.6 (0.2-2.1)	0.7 (0.6-0.9)
Other	2.6 (1.8-3.7)	1.2 (1.1-1.4)

Pedersen AB et al. in draft

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Pedersen AB et al. in draft

Conclusion

- Incidence of THA due to OA is still increasing, whereas incidence of THA due to RA is decreasing in Denmark;
- Implant survival among RA patients is similar to that of OA patients
- THA patients with RA have significant lower risk for VTE compared with OA patients;
- THA patients with OA have lower mortality than background population, whereas mortality among RA patients is similar to that of the background population.

Thank you for your attention

Ved yderlige spørgsmål vedr. de enkelte studier
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