



Innovation in Total Hip Arthroplasty

What patients want

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What would you prefer?

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Our world is all about innovation








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Questions

Are all innovations improvements?
Do we embrace innovations for ourselves or for our patients?
What about the risk-benefit analysis?

What if I was a patient?

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"If I was a patient" checklist



TOP 3 priorities

- ✓ Good function → Surgeon
- ✓ Minimal risks → Surgeon
- ✓ Long-lasting result → Implant

Secondary priorities
Fast rehabilitation, small scare, low cost, easy revision

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TOP 3 priorities "Minimal risks"

Surgical risks Post-OP complications

Implants with less periprosthetic fracture risks

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TOP 3 priorities "Minimal risks"

Risk of dislocation

Standard cup Innovative solution

Training, experience & dedication

What do you prefer as a patient?...

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TOP 3 priorities "Minimal risks"

Risk of dislocation

Wear and intra-prosthetic dislocations¹
Overall good innovation for patients at risk

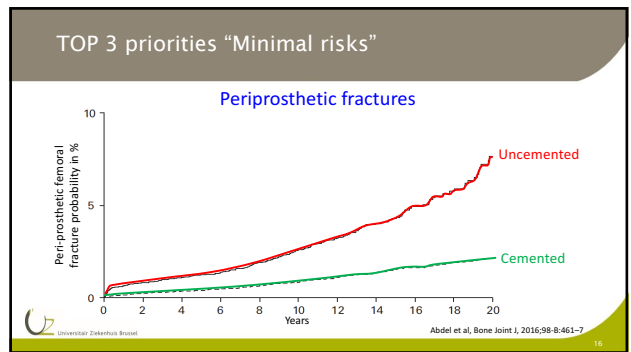
ARM² & high revision rates²
Largely abandoned

High rate of radiolucent lines & high metal ions³
Largely abandoned

High rate of squeaking⁴
Has not been largely adopted

¹Battalier et al, International Orthopaedics, 2017, 41:645-659
²Ratto et al, PLoS ONE, 2016, 11(3): e0147872
³Naji et al, Bone Joint J, 2015, 7-B(3):300-5
⁴Zhou et al, J Orthop Surg Res 2018, 13:133

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TOP 3 priorities "Minimal risks"

Periprosthetic fractures

Can new implants solve that problem?...

CPT¹ Spotorno² Image³
Cemented tapered Uncemented tapered Uncemented anatomic

¹Palan et al, Bone Joint J 2016;98-B:1347-54
²Scheerlinck et al, Acta Orthop Belgica, 2010,76(2):189-98
³Steit et al, J Bone Joint Surg [Br] 2011;93-B:178-83

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TOP 3 priorities "Long lasting"

Long-term fixation Wear and osteolysis

But improving implant survival is challenging

Long-term studies and registry data are needed

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