

Changement de prothèse de genou pour infection : Evolution des pratiques depuis 2008

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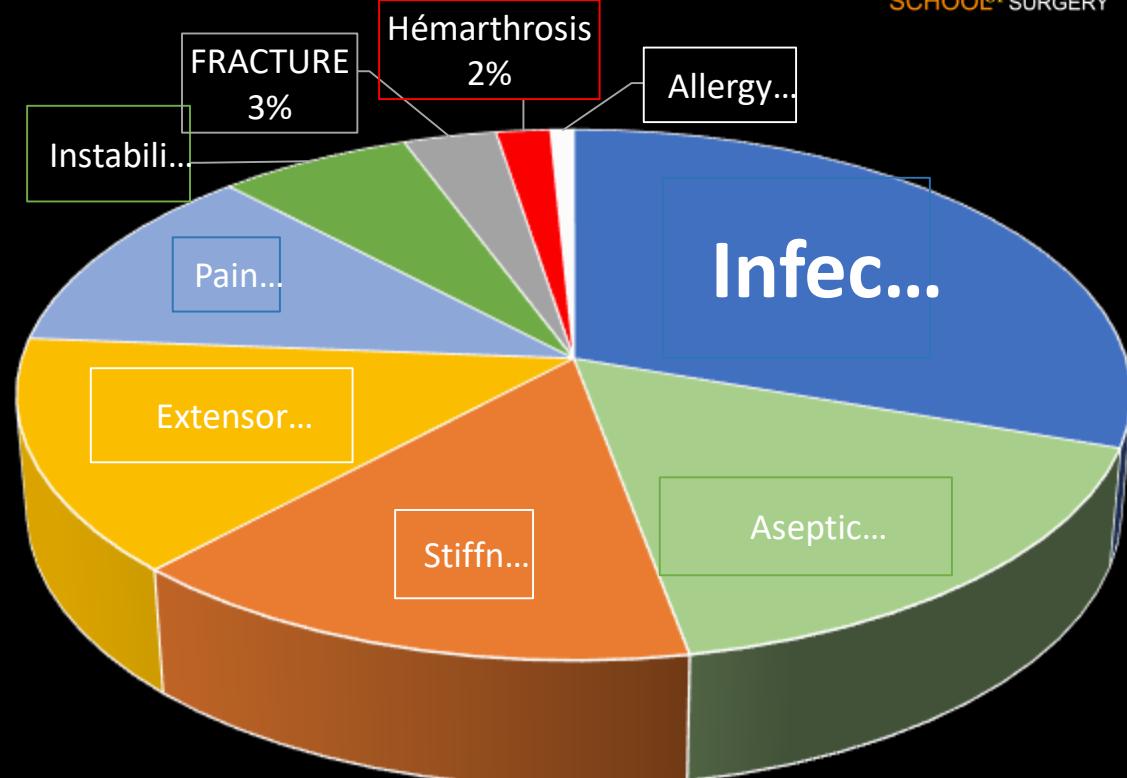
The Challenge of infection



- 1170 RTKA
- Between 2010 and 2015

1st etiology = Infection

- 16% of R-RTKA
- 75% : < 1 year



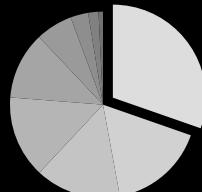
Infection

355/1170 (30%)



LYON
SCHOOL
of
KNEE
SURGERY

	One stage RTKA	Two stage RTKA
Total rate (%)	21 (11,6%)	160 (88,4%)
Revision rate (n, %)	2 (0,5%)	47 (29%)
Revision etiology (n, %)		
Septic	1 (50%)	35 (74,5%)
Mechanical	1 (50%)	12 (25,5%)



Challenge ?

Journal of Orthopaedic Surgery 2008;16(1):58-65

Quality of life after infection in total joint replacement

Cahill J, Shadbolt B, Scarvell J, Smith P.

“...” Infection following TJR reduces patient satisfaction and seriously impairs functional health status and health-related quality of life.”...”

Indications & Contra-indications of a one-stage revision?



- Success of One-stage exchange **for selected patients**



Outcomes of revision total hip replacement for infection after grading according to a standard protocol

S. I. S. Oussedik,
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United Kingdom

Clin Orthop Relat Res (2015) 473:8–14
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SYMPOSIUM: 2014 KNEE SOCIETY PROCEEDINGS

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Is Single-stage Revision According to a Strict Protocol Effective in Treatment of Chronic Knee Arthroplasty Infections?

Fares Sami Haddad FRCS (Tr&O), Mohamed Sukeik MRCSEd,
Sulaiman Alazzawi MRCSEd

- Few high-quality literature (no reliable comparative study)
- Indications depends of « **Common-sense** »

Indications & Contra-indications of a one-stage revision?



Outcomes of revision total hip replacement for infection after grading according to a standard protocol

S. I. S. Oussedik,
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Proposals of strict criteria for single-stage revision (THA)

Table I. Criteria for single- versus two-stage revision

Single-stage

Healthy soft tissues

Minimal bone loss allowing cemented femoral reconstruction

Organism and sensitivities known

Table II. Additional compromising factors considered

Category	Compromising factors
Organism factors	Multiresistant organisms MRSA/MRSE Polymicrobial infection Unusual commensals Unusual resistance profiles Unidentified infective organisms
Host factors	Immunosuppression Concurrent sepsis Systemic disease Re-infection
Local factors	Significant bone loss precluding cemented reconstruction Significant soft-tissue compromise Peripheral vascular disease

⇒ Success rate of infection eradication = 96% with these criteria

2nd International Consensus Group on Periprosthetic Joint Infection

July 2018 - Thomas Jefferson University, Philadelphia



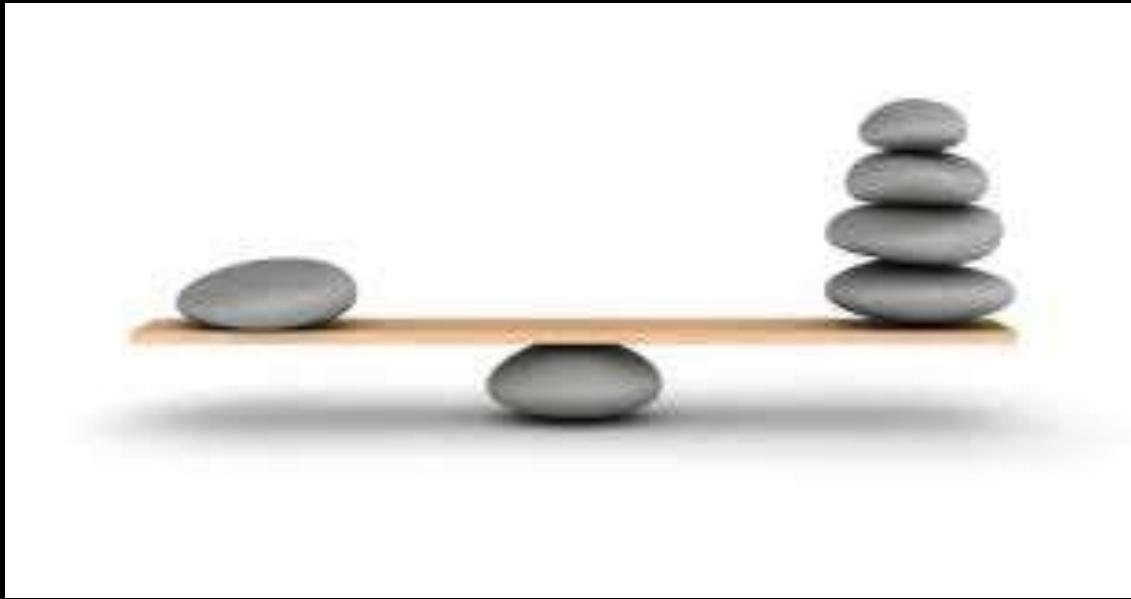
Proceedings of the Second International Consensus Meeting on Musculoskeletal Infection

Chairmen:
Javad Parvizi, MD, FRCS
Thorsten Gehrke, MD



1 stage

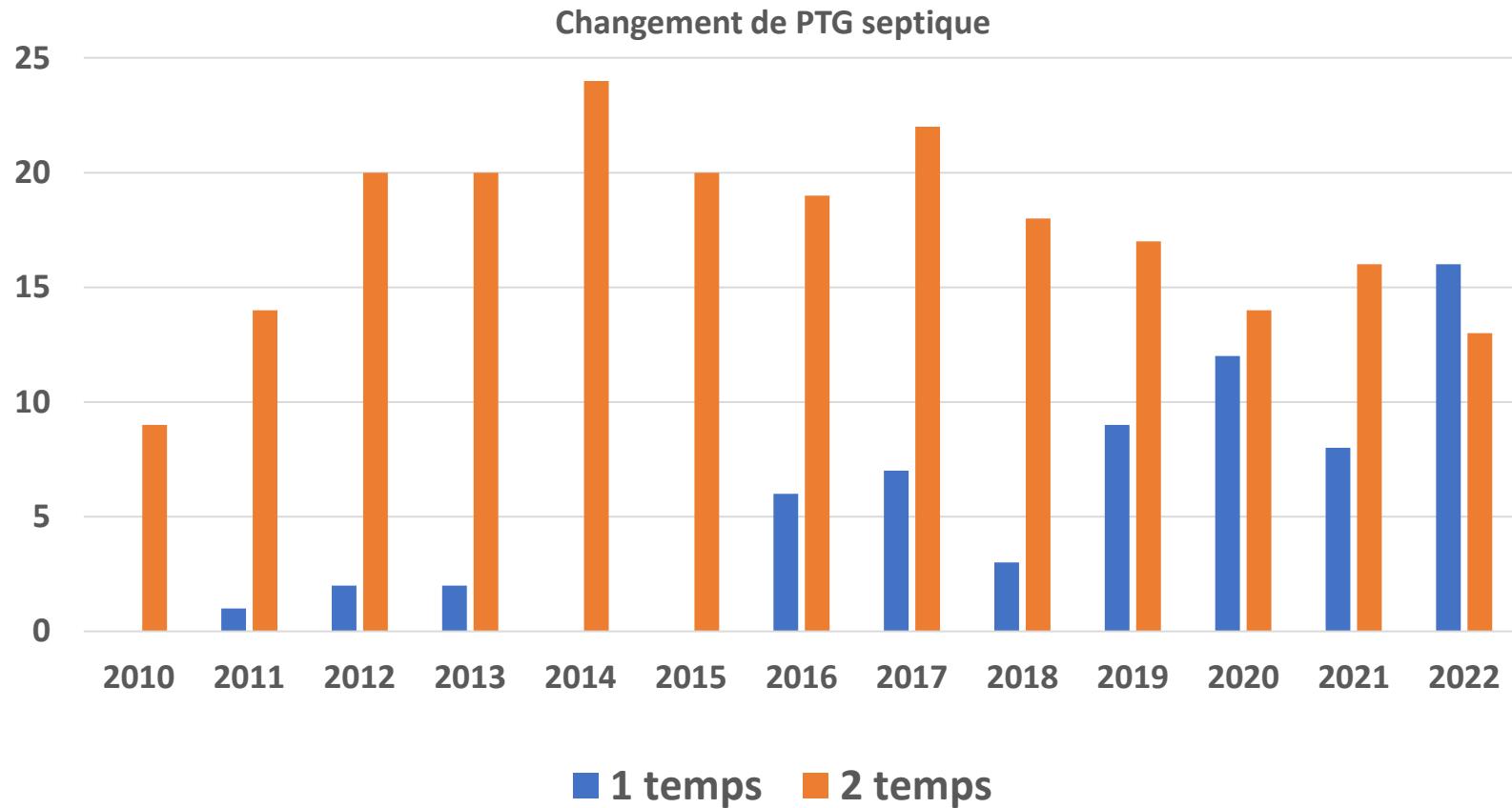
2 stages



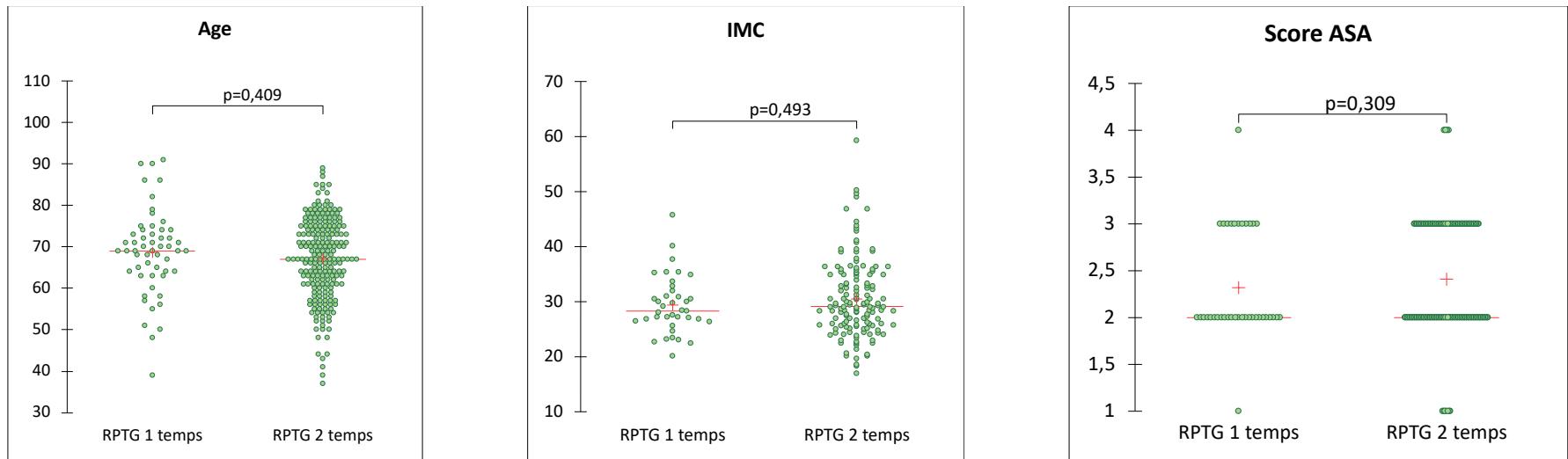
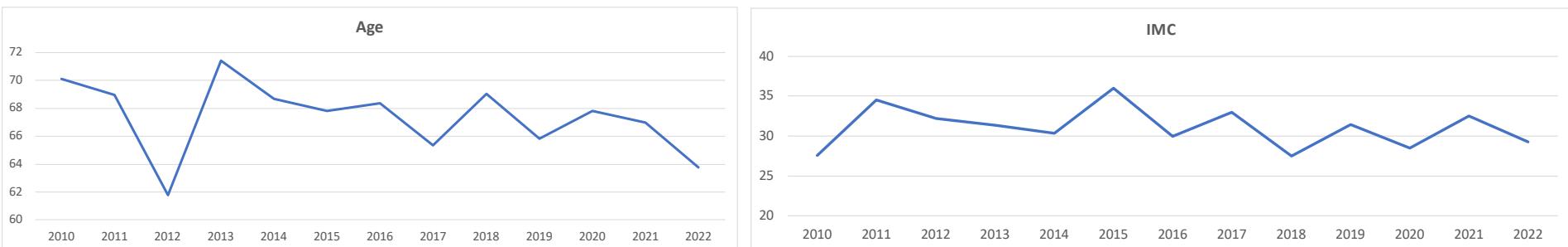
ATB Loaded cement



Evolution du 2 temps vs 1 temps

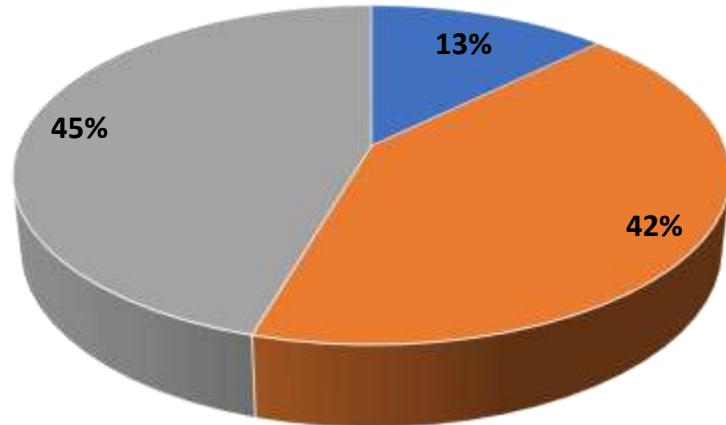


Populations similaires



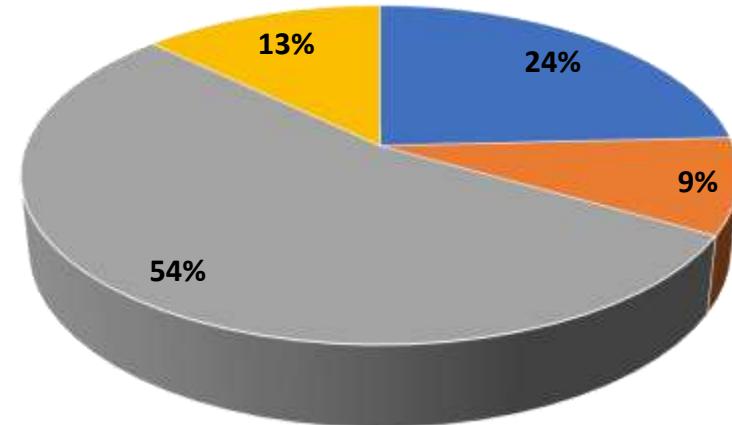
Types d'implants réimplantés

RPTG 1 temps



- Posterostabilisée
- Charnière
- CCK
- Arthrodèse

RPTG 2 temps

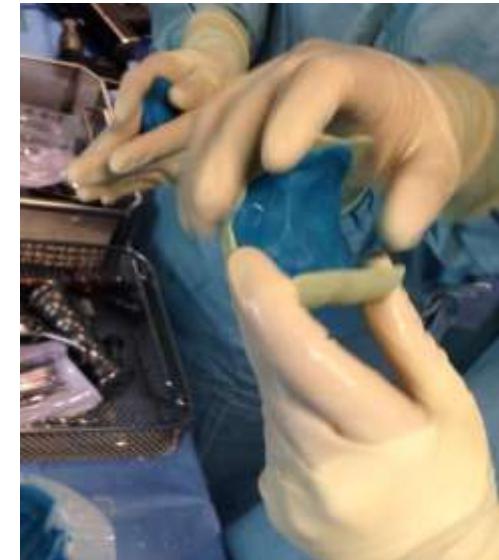


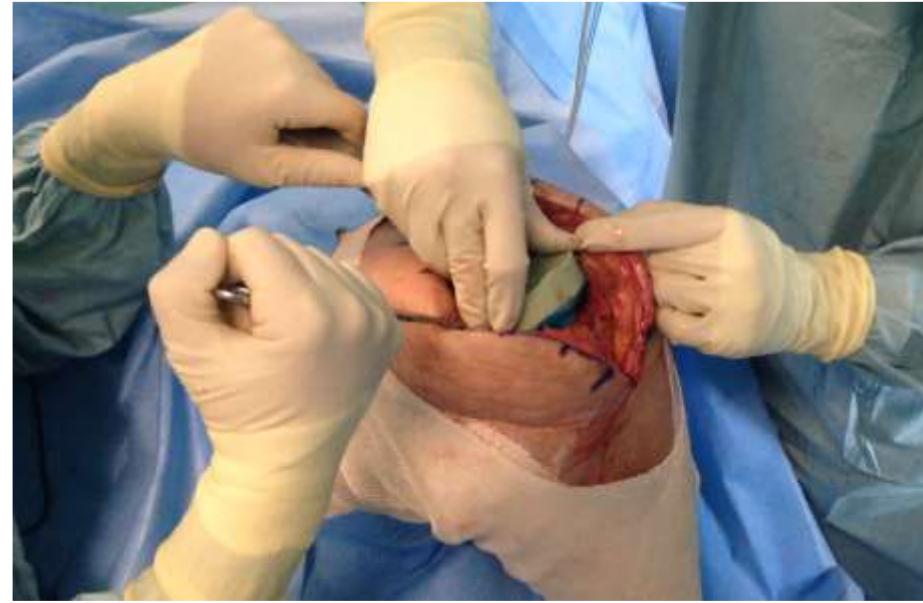
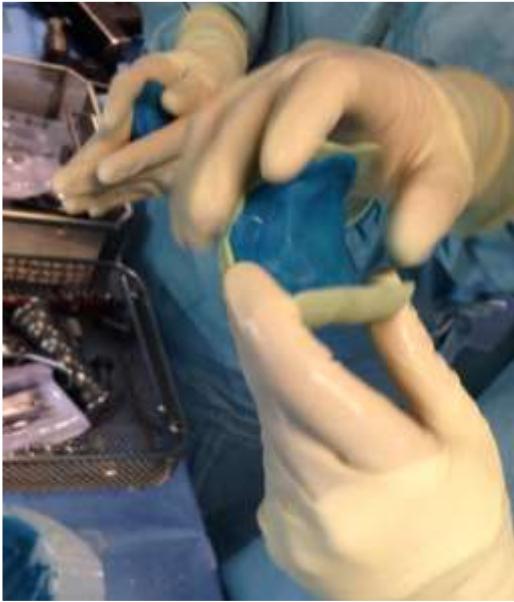
- Posterostabilisée
- Charnière
- CCK
- Arthrodèse

p<0,0001 pour les CCK et les arthrodèses (pas de CCK avant 2016)



DYNAMIC SPACERS





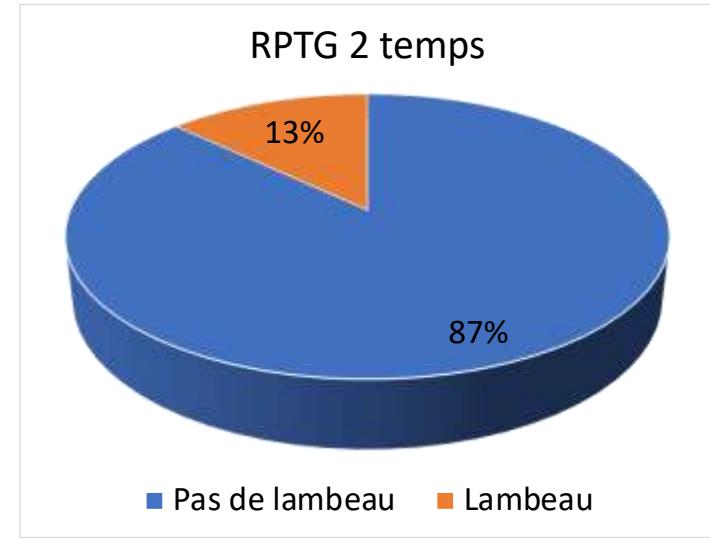
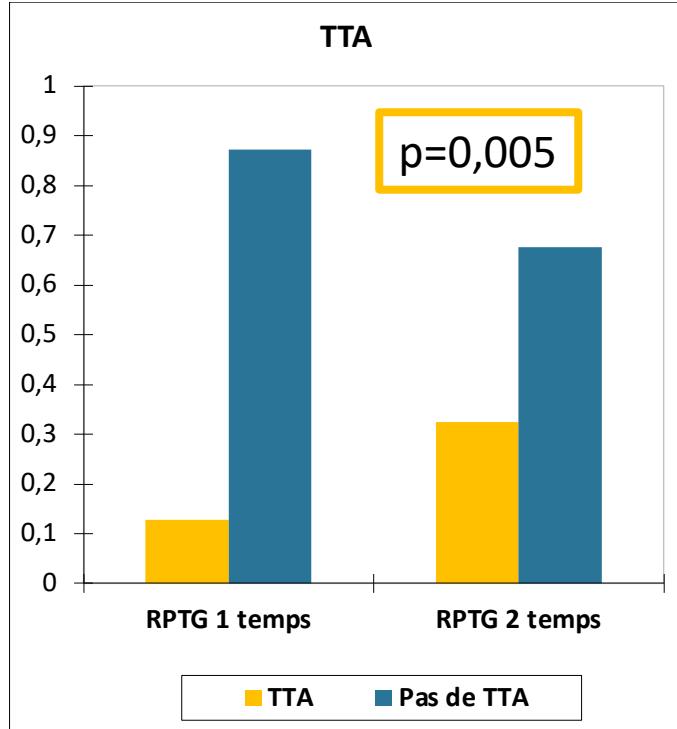


Benefits

- ❖ Mobility inbetween
- ❖ Less stiffness



Gestes associés



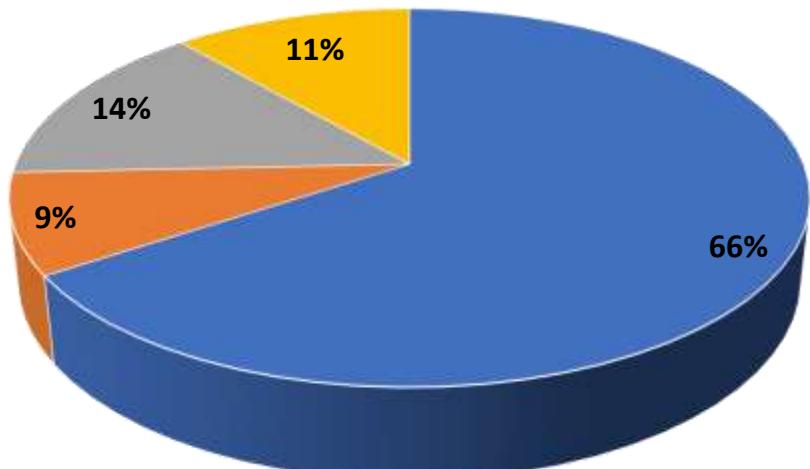
Pas de Lambeau en 1 temps

Free flaps



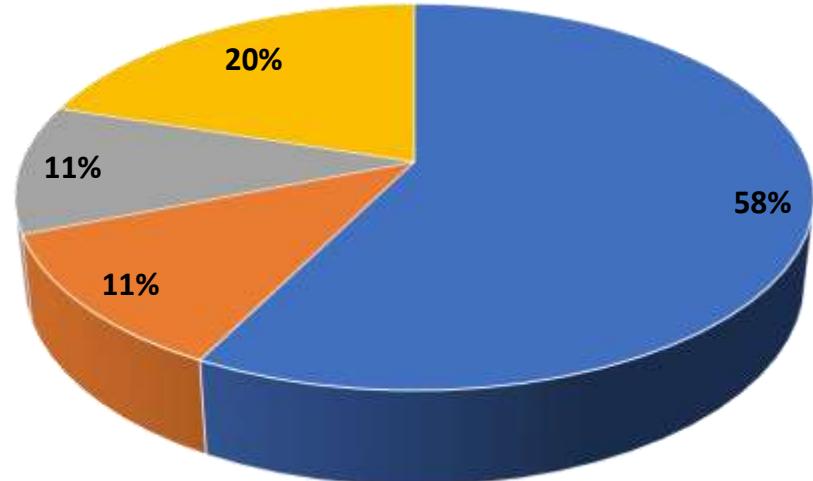
Résultats > 1 an

RPTG 1 temps



- Guérison
- Echec mécanique
- Sepsis contrôlé
- Echec septique

RPTG 2 temps

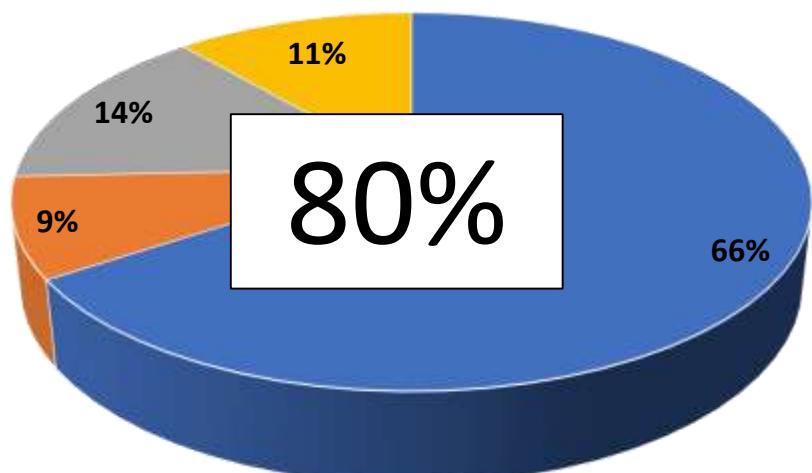


- Guérison
- Echec mécanique
- Sepsis contrôlé
- Echec septique

p=0,575

Résultats > 1 an

RPTG 1 temps



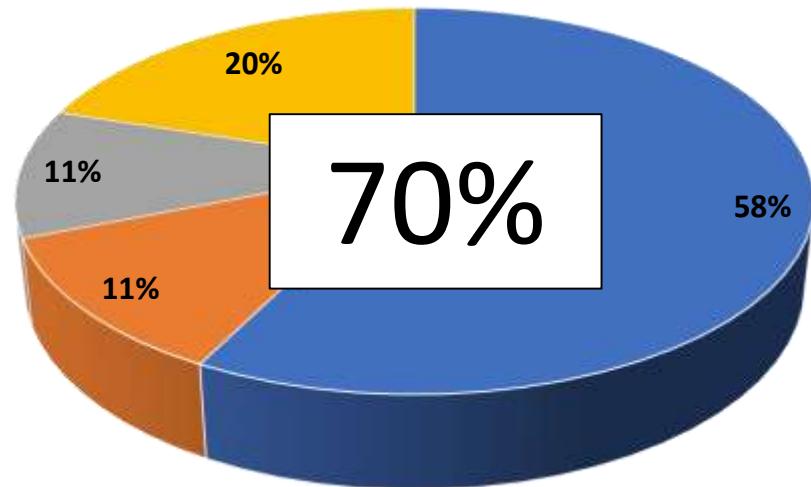
■ Guérison

■ Echec mécanique

■ Sepsis contrôlé

■ Echec septique

RPTG 2 temps



■ Guérison

■ Echec mécanique

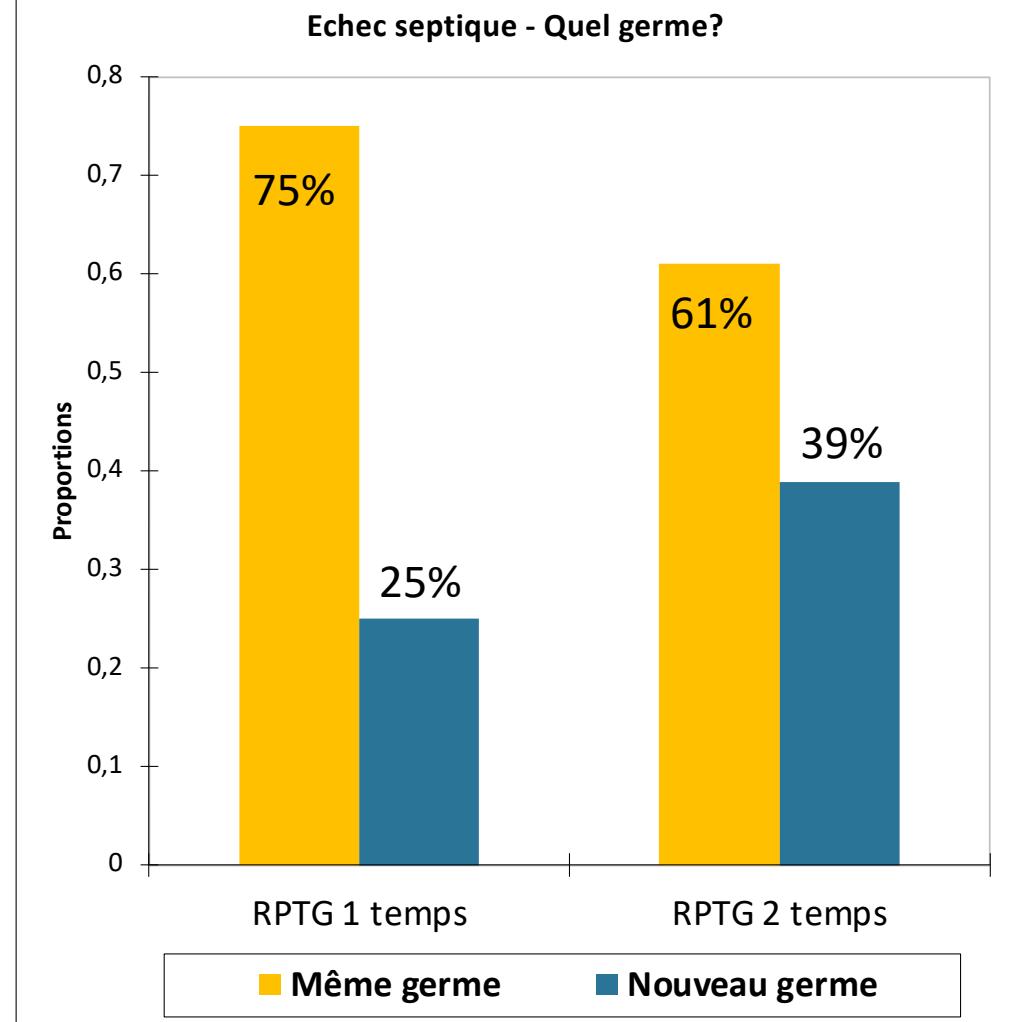
■ Sepsis contrôlé

■ Echec septique

p=0,575

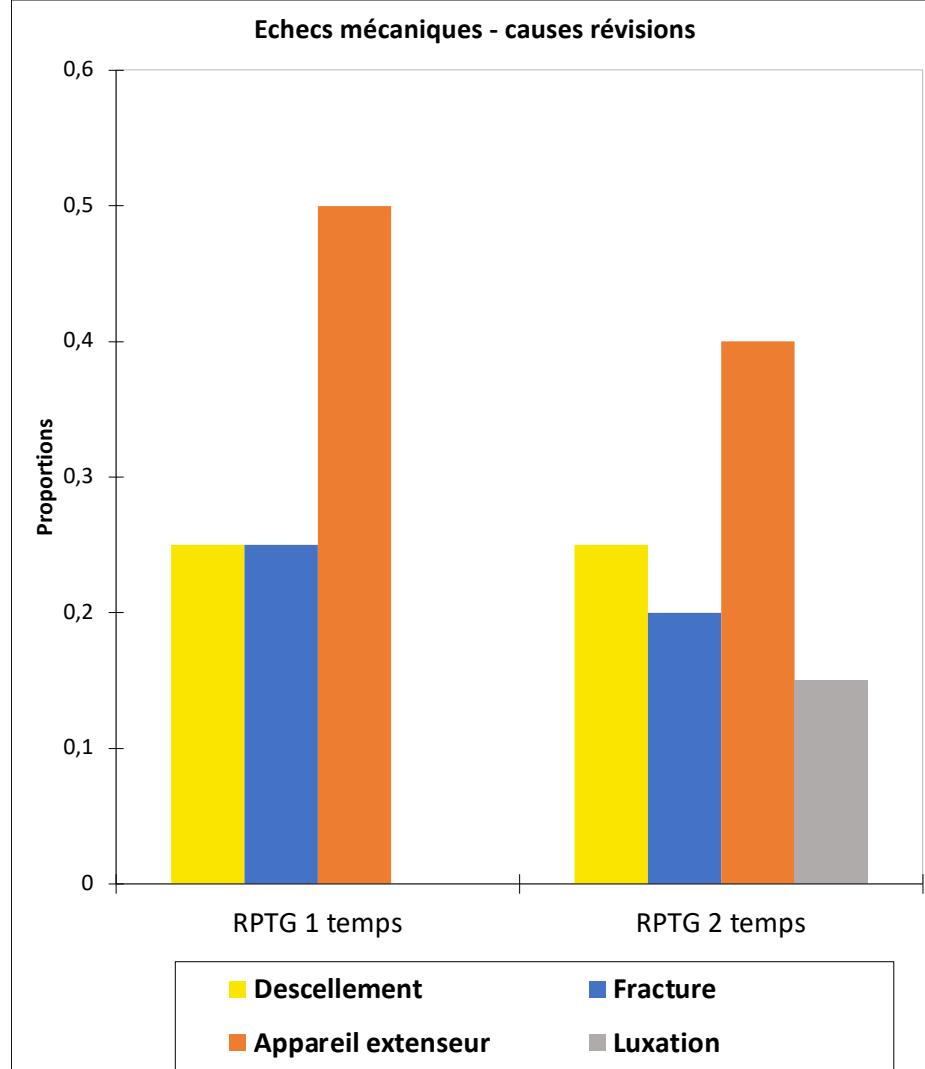
Echecs septiques

p=0,586



Echecs mécaniques

p=0,868



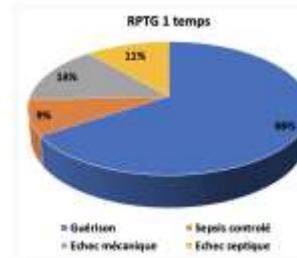
Massive allografts



Evolution de nos pratiques

- Davantage de 1 temps (50/50 2023)
- Critères de sélection
- Complexité des 2 temps ++
- Résultats encourageants
(80% 1 temps / 70% 2 temps)

80%



70%

