

Actualités Réso-Infectio-PACA-Est



Pierre-Marie Roger

46^{ème} Réunion Thématique du Réso-Infectio-PACA-Est

Château St Martin, Vendredi 25 mai 2018

Vie du Réso: 11 ans depuis son initiation, 7 ans depuis son institution

- > 150 adhérents; > 40 établissements
- réunions thématiques, journal, protocoles partagés, astreinte téléphonique...
- une « certaine » vivacité : cf travaux
- aide logistique privée
- résistance aux GHT ?
- penser à la relève

26 Communications du RésO en 2016-2018

- Sensibilisation au Bon Usage des carbapénèmes: audit régional des prescriptions dans sept établissements de santé. VIARD D, BERTRAND B, AGULLO M, LOMBARDO AC, BOUSSETA J, FAFI F, LABAT C, FALCONI I, MONDAIN V, DEGAND N, RISSO K, FOSSE T, ROGER PM, RUIIMY R, LIEUTIER-COLAS F et le RésO-Infectio-PACA-Est. *XVIème Congrès SFPC (n°142)*, Montpellier, février 2016
- Appropriate use of carbapenems: a regional audit in seven hospitals. VIARD D, LIEUTIER-COLAS F, BERTRAND B, AGULLO M, LOMBARDO AC, BOUSSETA J, LABAT C, FALCONI I, RISSO K, ROGER PM, RUIIMY R, and the RésO-Infectio-PACA-Est. *26th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) (P-1298)*, Amsterdam, avril 2016
- New software to help optimize regional antimicrobial stewardship policy ? Results from a two year- survey of antibiotic consumption and antimicrobial resistance in five hospitals in south-esatern France. WAREMBOURG M, LOMBARDO AC, BLANC V, BERTRAND B, LEOTARD S, LABAT C, AGULLO M, MONDAIN V, BOUSSAT S, ROGER PM, RUIIMY R, LIEUTIER-COLAS F, and the Regional Network ResO-Infectio-PACA-Est. *26th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) (EV-0707)*, Amsterdam, avril 2016
- Antibiotherapy of community-acquired urinary tract infection due to multi-susceptible *Escherichia coli*: also a challenge for infectious diseases referres ? AMRANE H, ROGER PM, LOMBARDO AC, DENIS E, COMTE B, HOFFMANN P, JOUBERT S, BLANC V, and the ResO-Infectio-PACA-Est Network. *26th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) (EV-0696)*, Amsterdam, avril 2016
- Severe community-acquired pneumonia in the elderly: impact of empirical antibiotic therapy without respiratory fluoroquinolones nor third generation cephalosporins. AILLET C, COURJON J, DEMONCHY E, RISSO K, CUA E, ROGER PM. *26th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) (O-402)*, Amsterdam, avril 2016
- Audit de ralisation des ECUV en SSR. ETIENNE P, LEBRUN C, ESCOFFIER B, LEFLOCH P, BARDAGI L. *XXVIIème Congrès National de la Société Française d'Hygiène Hospitalière (SF2H)*, Nantes, juin 2016
- Endocardites infectieuses : audit régional sur la qualité de prise en charge. CHIRIO D, DEMONCHY E, MARTIS N, MOCERI P, MOTHE A, FOUCAULT C, DE LA CHAPELLE A, CHAILLOU S, PIETRI P, TIGER F, ROGER PM. *17èmes Journées Nationales d'Infectiologie (JNI) (ENDO-08)*, Lille, juin 2016
- Ratio ceftriaxone/cefotaxime : un indicateur de bon usage des antibiotiques ? BERTRAND B, WAREMBOURG M, LIEUTIER-COLAS F, LOMBARDO AC, AGULLO M, LABAT C, FARACO-BONNIER P, RAETZ S, ROGHI J, ROGER PM, pour le RésO-Infectio-PACA-Est. *17èmes Journées Nationales d'Infectiologie (JNI) (BU-26)*, Lille, juin 2016
- Infectiologie Réfèrent pour des Etablissements de Soins Privés: importance des infections associées aux soins. ROGER PM, LEROUX E, ROGHI J, DELLA GUARDIA M, BOIVIN HJ, GIRARD D. *17èmes Journées Nationales d'Infectiologie (JNI) (BU-05)*, Lille, juin 2016
- Amélioration de la couverture vaccinale anti-pneumococcique d'une cohorte de patients vivants avec le VIH en Région PACA-Est. ETIENNE C, MOTHE A, DIDES PY, VASSALLO M, ROGER PM, PUGLIESE P. *17èmes Journées Nationales d'Infectiologie (JNI) (VAC-06)*, Lille, juin 2016
- Bon usage antibiotiques et hygiène hospitalière : appropriation insuffisante des mesures (P108). ROGER PM, MAGNANI J, CARRAT V et le RésO-Infectio-PACA-Est. *36ème Réunion Interdisciplinaire de Chimiothérapie Anti-Infectieuse (RICA1)*, Paris, décembre 2016
- Audit des patients bactériémiques au SAU dans 3 hôpitaux de PACA-Est (P116). AILLET C, KERKAOU I, ETIENNE P, JAMES D, FRIBOURG A, PELLAT O, LEOTARD S, LAMECHE D, NERI D, ROGER PM et le RésO-Infectio-PACA-Est. *36ème Réunion Interdisciplinaire de Chimiothérapie Anti-Infectieuse (RICA1)*, Paris, décembre 2016

- Audit régional de prise en charge des endocardites infectieuses (P320). CHIRIO D, DEMONCHY E, MONDAIN V, GIBELIN P, MOTHE A, FOUCAULT C, LOPEZ S, ZARQANE N, VILLAIN P, DENIS E, VASSALLO M, MAULIN L, ROGER PM et le RésO-Infectio-PACA-Est. *36ème Réunion Interdisciplinaire de Chimiothérapie Anti-Infectieuse (RICA1)*, Paris, décembre 2016
- Bacteraemia in the emergency department: audit of antibiotic therapy and reassessment. AILLET C, BERKAOU I, ETIENNE P, JAMMES D, FRIBOURG A, PELLAT O, LEOTARD S, LAMECHE D, NERI D, ROGER PM. *27th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID)*, Vienne, avril 2017
- Bactériémies aux Urgences: antibiothérapie probabiliste, réévaluation et pronostic. AILLET C, BERKAOU I, LAMECHE D, JAMMES D, FRIBOURG A, PELLAT O, LEOTARD S, ETIENNE P, ROGER PM. *Congrès de la Société Française de Médecine d'Urgence (SFMU)*, Paris, mai 2017
- Bactériémies aux Urgences : antibiothérapie probabiliste, réévaluation et pronostic. AILLET C, PANTALONI O, TOURNOUD S, FRIBOURG A, LEOTARD S, SINDT A, ETIENNE P, ROGER PM. *18èmes Journées Nationales d'Infectiologie (JNI) (ENDO-04)*, Saint-Malo, juin 2017
- Prélèvements bactériologiques aux urgences: organiser leur utilisation ! ETIENNE P, NERI D, LAMECHE D, ROGER PM. *18èmes Journées Nationales d'Infectiologie (JNI) (BU-38)*, Saint-Malo, juin 2017
- Evolution de la confirmité de l'antibiothérapie des infections urinaires communautaires à *Escherichia coli* multi-sensible en ville: place de l'antibiogramme ciblé ? WEISS N, AMRANE H, FRANCOIS A, ROGER PM, DENIS E, LIGUORI S, COMTE B, VASSALLO M, HOFFMANN P, BLANC V and the RésO-Infectio-PACA-Est. *18èmes Journées Nationales d'Infectiologie (JNI) (BU-37)*, Saint-Malo, juin 2017
- Pyélonéphrites aiguës de l'enfant à Entérobactéries productrices de bêta-lactamases à spectre étendu dans le Sud-Est de la France. BOUSKINE A, KHALFI A, HAAS H, ROGER PM, BLANC V, le RésO-Infectio-PACA-Est. *18èmes Journées Nationales d'Infectiologie (JNI) (PED-03)*, Saint-Malo, juin 2017
- Bactériémie à entérocoque et bon usage des antibiotiques. ROGER PM, DEROUHLE G, NORMAND G, FERRET J, MALLICK S, GIMEL P. *37ème Réunion Interdisciplinaire de Chimiothérapie Anti-Infectieuse (RICA1) (CO-028)*. Paris, décembre 2017
- Infections urinaires communautaires et adéquation de l'antibiothérapie: étude prospective d'impact des antibiogrammes ciblés. MICHELANGELI C, GIRARD-LAMOULERE D, ASSI AF, DELLA GUARDIA M, BOIVIN HJ, ROGER PM. *37ème Réunion Interdisciplinaire de Chimiothérapie Anti-Infectieuse (RICA1) (CO-002)*. Paris, décembre 2017
- A multicenter audit of the antibiotic therapy for *Enterococcus bacteraemia*. MANUELLO R, SOUHAIL B, LE MARECHAL M, CHRETIEN R, ASSI F, LEVENT T, SCHOENIG A, ROGER PM. *28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID)*, Madrid, avril 2018
- Syndromic approach for meningo-encephalitis care: e.ME panel, BioMérieuxd in a general hospital. SINDT A, BLANC V, DUBUIS-GOURDANGE P, DORIN J, RIFFAUD K, WEISS N, ROGER PM. *28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID)*, Madrid, avril 2018
- Approche syndromique pour le diagnostic de gastro-entérite: évaluation du panel PCT Multiplex FilmArray® GE, BioMérieux dans un hôpital général. DUBUIS-GOURDANGE P, SINDT A, BLANC V, DORIN J, RIFFAUD K, WEISS N, ROGER PM. *19èmes Journées Nationales d'Infectiologie (JNI) (DIAG-06)*, Nantes, juin 2018
- Utilisation combinée des protocoles d'antibiothérapies et des antibiogrammes ciblés pour le bon usage des antibiotiques. MICHELANGELI C, GIRARD-LAMOULERE D, ASSI A, DELLA GUARDIA M, BOIVIN HJ, ROGER PM. *19èmes Journées Nationales d'Infectiologie (JNI) (BU-05)*, Nantes, juin 2018
- Profil épidémiologique et bactériologique des gonococcies isolées en milieu hospitalier. DELAGES J, KEIRLE G, CUA E, DEGAND N, BLANC V, DEL GIUDICE P, ROUDIERE L, ROGER PM. *19èmes Journées Nationales d'Infectiologie (JNI) (IST-05)*, Nantes, juin 2018

4 Publications du RésO en 2016-2018, 3 en cours

- **Recommandations du bon usage des antibiotiques : améliorer les pratiques médicales et non assujettir les infectiologues.** ROGER PM, LEROY I, GARRAIT V, GUERY B. *Med Mal Infect* 2016; 46: 115-6
- **Pneumonies aiguës communautaires avec antigènes solubles urinaires positifs : facteurs associés à une antibiothérapie ciblée.** MOTHES A, LEOTARD S, NICOLLE I, SMETS A, CHIRIO D, ROTOMONDO C, TIGER F, DEL GIUDICE P, PERRIN C, NERI D, FOUCAULT C, DELLA GUARDIA M, HYVERNAT H, ROGER PM, RésO-InfectiO-PACA-Est. *Med Mal Infect* 2016; 46 : 365-71
- **Est-il possible de réduire la durée de l'antibiothérapie des exacerbations de BPCO chez les patients hospitalisés ?** VANDENBOS F, CAISSO C, HARB E, VIDAL R, NICOLLE I, RISSO K, ROGER PM. *Rev Mal Res* 2017, 34: 275-7
- **Bacteraemia in emergency departments: effective antibiotic reassessment is associated with a better outcome.** AILLET C, JAMMES D, FRIBOURG A, LEOTARD S, PELLAT O, NERI D, LAMECHE D, PANTALONI O, TOURNOUD S, ROGER PM. *Eur J Clin Microbiol Infect Dis* 2018; 37: 325-31



Président:
Pierre-Marie ROGER
 Infectiologue
 Hôpital Archet 1 - CHU de Nice
 CS 23079 - 06200 Nice Cedex 3
 Tél : 04 93 03 54 69/03 88 97 72 96
 roger.pmr@chunice.fr

Modérateur:
Véronique BLANC
 Biologiste
 Centre Hospitalier Antibes/Jean les Pins
 06610 Antibes Cedex
 Tél : 04 97 24 77 22
 veronique.blanc@ch-antibes.fr

Secrétaire Générale:
Stéphane BOURGAIN
 Pharmacien
 Hôpital Archet 2 - CHU de Nice
 CS 23079 - 06200 Nice Cedex 3
 Tél : 04 92 03 31 84
 bourgain.st@chunice.fr

Modérateur Médical:
Martino VASSALLO
 Infectiologue
 Centre Hospitalier de Cannes
 06114 Cannes
 Tél : 04 93 69 71 79
 martinovassallo@ch-cannes.fr

Traitement:
Olivier KETA PERSE
 Hygiéniste
 Centre Hospitalier Princesse Grace
 BP 488 - Nic. 06103 Monaco Cedex
 Tél : 33 04 92 41 67 05
 keta@chgm.mc

Modérateur:
Sophie LEOTARD
 Biologiste
 Centre Hospitalier de Grasse
 06130 Grasse
 Tél : 04 93 09 50 48
 leotard@ch-grasse.fr

Co-Modérateur:
Stéphane MONDIN
 Infectiologue
 Hôpital Archet 1 - CHU de Nice
 CS 23079 - 06200 Nice Cedex 3
 Tél : 04 93 03 54 66/06 62 84 30 35
 mondin.st@chunice.fr

Modérateur de la Recherche:
Alexis MATHES
 Infectiologue
 Centre Hospitalier de la Dragaille
 BP 249 - 85007 Dragailgen Cedex
 Tél : 04 94 60 03 12
 mathes.alexis@chdragailgen.fr

Modérateur Médical avec la Presse:
Stéphane PROFF
 Biologiste
 Centre Hospitalier Côte d'Azur
 Tél : 06 46 71 22 03
 proff.st@chunice.fr

« Les Infections Ostéo-Articulaires »

- 10h30-10h50 : Morbi-mortalité liée aux infections ostéo-articulaires. **Pierre-Marie Roger, Faculté de Médecine de Nice**
- 10h50-11h20 : Un temps versus deux temps, le point de vue des infectiologues. **Cédric Foucault, CH d'Hyères**
- 11h20-12h00 Un temps versus deux temps, le point de vue des orthopédistes. **Pro : Baudouin Redréau - Anti : Pierre Leguilloux, Clinique St Michel, Toulon**
- 12h00-12h30 : Daptomycine dans les infections ostéo-articulaires, où en est-on ? **Johan Courjon, CHU de Nice**
- 14h00-14h30 : Risque infectieux en chirurgie du rachis. **Nicolas Bronsard, CHU de Nice**
- 14h30-15h00 : Kit de prélèvement pour infection ostéo-articulaire au sein du Réseau. **Delphine Girard, Laboratoire Cerballiance, Toulon**
- 15h00-15h30 : Utilisation de la CRP dans les IOA : données scientifiques. **Stéphane Liguori, CH d'Antibes**
- 15h30-16h00 : Le parfait dossier en expertise du fait d'une complication infectieuse. **Gérard Orst, Expert de Justice, Nice**

Morbi-mortalité des infections ostéo-articulaires

Pierre-Marie Roger

46^{ème} Journée Thématique du Réso-Infectio-PACA-Est
Château St Martin, Vendredi 25 mai 2018

The screenshot shows a web browser window displaying the website of the French Ministry of Health (Ministère des Solidarités et de la Santé). The page is titled "Infections ostéo-articulaire : questions réponses". The navigation menu includes "Actualités", "Grands dossiers", "Ministère", "Métiers et concours", "Professionnels", and "Études et statistiques". The main content area lists several questions related to osteo-articular infections, each with a progress indicator (a circle with a dot) on the right side, suggesting a quiz or interactive format. The questions are:

- Qu'est ce qu'une infection ostéo-articulaire complexe ?
- Combien de personnes sont touchées par an ?
- La prise en charge des infections ostéo-articulaires constitue-t-elle un enjeu de santé publique ?
- Pourquoi des centres de référence ?
- Comment ont été identifiés les centres de référence en France ?

The browser's address bar shows the URL: <http://solidarites-sante.gouv.fr/soins-et-maladies/prises-en-charge-specialisees/infections-osteo-articulaires/infections-osteo-articulaire-question>. The taskbar at the bottom shows the Windows operating system with various application icons and a system clock indicating 05:38 on 24/05/2018.

http://solidarites-sante.gouv.fr/soins-et-maladies/prises-en-charge-specialisees/infections-osteo-articulaires/infections-oste-articulaire-question

Rechercher...

MSN France: Hotmail, Outlook, ... Infections ostéo-articulaire : ...

Fichier Edition Affichage Favoris Outils ?

Rechercher Partager Autres

Sido... Jean... Emed... Cap ... Les ... St M... Mail... Emed... EMED... Inke... St A... St R... Past... Orme... Emed... MONT... Ares... EMED...

Connexion

Qu'est ce qu'une infection ostéo-articulaire complexe ?

Combien de personnes sont touchées par an ?

La prise en charge des infections ostéo-articulaires constitue-t-elle un enjeu de santé publique ?

Pourquoi des centres de référence ?

Il s'agit d'améliorer la qualité de la prise en charge pour cette pathologie par le regroupement des compétences des différentes spécialités concernées au sein d'un centre de référence.

La qualité repose essentiellement sur une organisation comprenant :

- ▶ Un accès rapide au diagnostic et aux soins les plus appropriés : Ceci repose sur la coordination des principales disciplines : chirurgien ou médecin incluant le médecin traitant, microbiologiste, radiologue.
- ▶ Un diagnostic microbiologique : C'est l'élément primordial d'une bonne prise en charge thérapeutique. Ceci nécessite la mise en œuvre de techniques validées tant pour la réalisation des prélèvements que pour les techniques de cultures et d'identification par le laboratoire de microbiologie.
- ▶ Une stratégie de traitement définie sur la base d'un avis pluridisciplinaire et des référentiels validés et régulièrement actualisés :
- ▶ Une prise en charge globale et continue jusqu'au domicile,
- ▶ La mise en œuvre de traitements spécifiques de qualité dans les meilleurs délais, en particulier chirurgical et anti-infectieux.

Comment ont été identifiés les centres de référence en France ?

Combien de centres de référence en France ?

05:40
24/05/2018



Prosthetic Joint Infection

Aaron J. Tande,^a Robin Patel^{a,b}

Division of Infectious Diseases, Department of Internal Medicine
Rochester, Minnesota, USA

SUMMARY

INTRODUCTION

EPIDEMIOLOGY

Incidence

Economic Impact

Risk Factors

Risk factors for hip and knee infection

Risk factors for shoulder and elbow infection

Composite risk scores

CLINICAL MANIFESTATIONS

Classification Schemes

PATHOGENESIS

Initiation of Infection

Role of Biofilm

Propagation of Infection

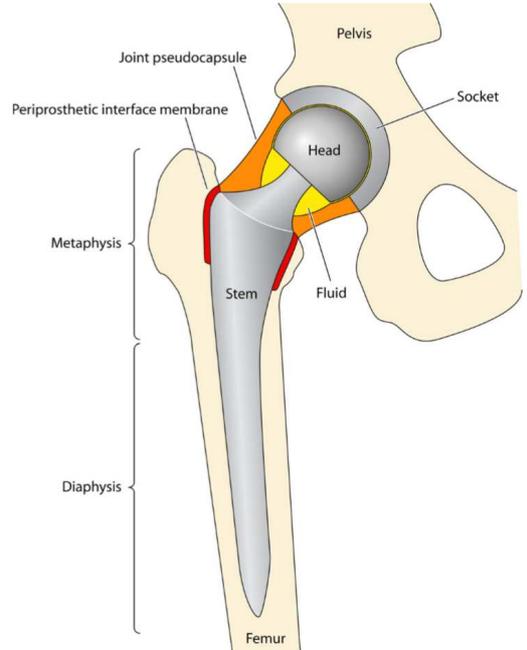
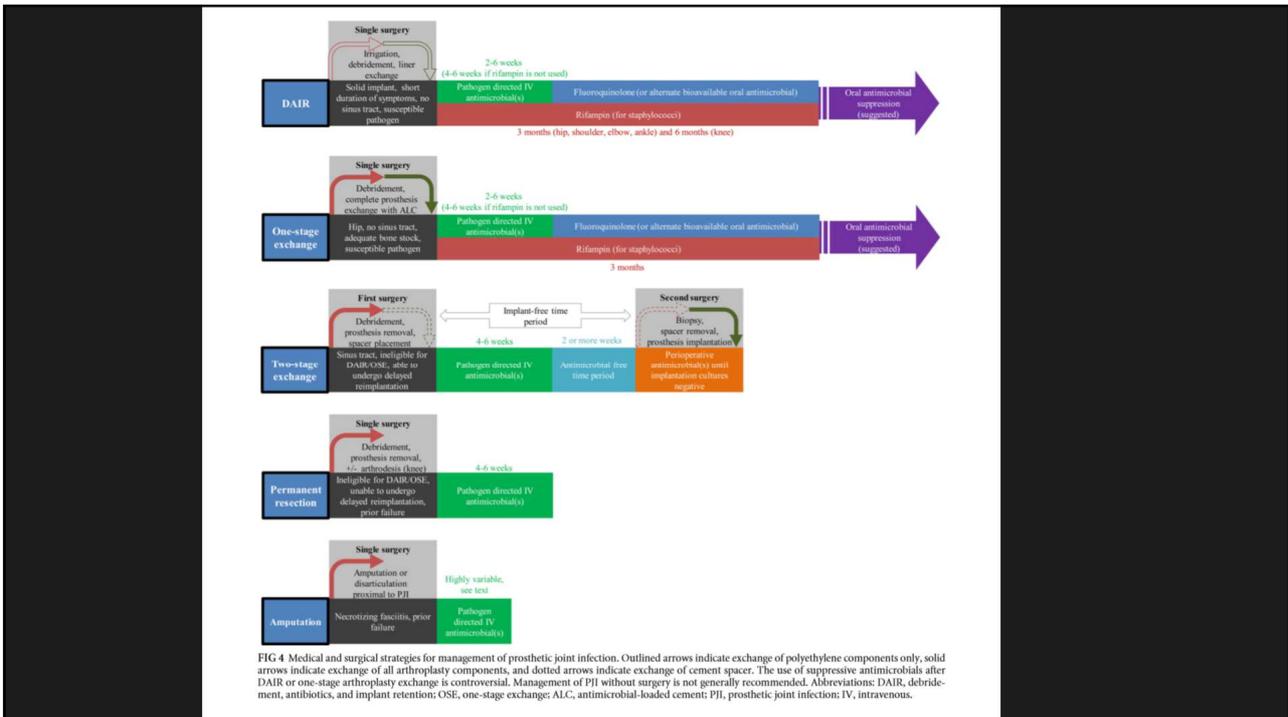
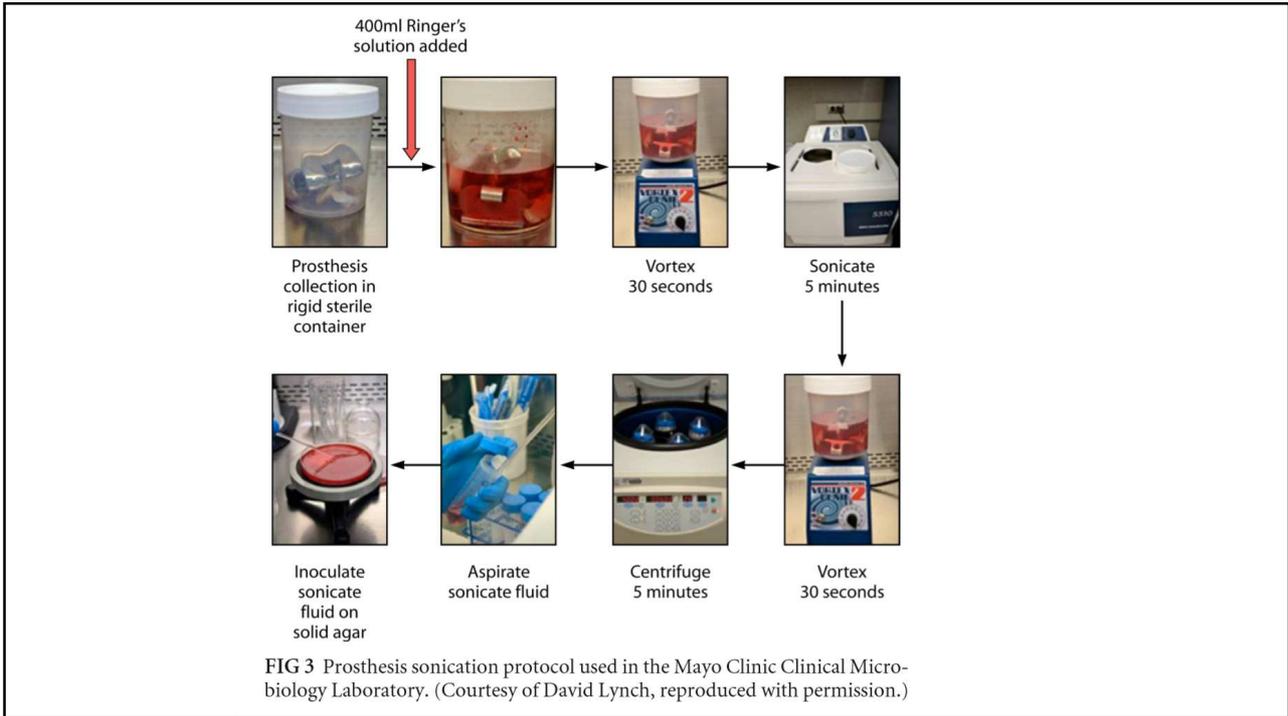


FIG 2 Schematic showing a total hip arthroplasty in place, with relevant structures highlighted.



Infections Ostéo-articulaires chez 28 453 Patients Hospitalisés en France en 2008

L.GRAMMATICO-GUILLON¹, A.I. LECUYER², S. BARON²,
S.GETTNER², C. GABORIT², E. RUSCH², L. BERNARD¹

¹ Service de Médecine Interne et Maladies Infectieuses

² Service de d'Information Médicale, d'Épidémiologie et d'Économie de la Santé,

CHRU de Tours



Caractéristiques des séjours pour IOA en France, 2008

	Native BJI		Device-associated BJI		p value
	N	%	N	%	
Public sector	20,514	83,2	7,919	69,2	NS
Surgical stay	11,334	46,0	8,513	74,4	0,001
Intensive care unit	1,552	6,3	689	6,0	NS
Transfer/ outstay					
home	17,447	70,8	6,711	58,6	0,001
died	931	3,8	391	3,4	NS
long term stay	216	0,9	111	1,0	NS
rehabilitation centres	3,485	14,1	3,004	26,2	0,001
length of stay [days (95% CI)]	16.8 d (16.6-17.1)		18.9 d (18.5-19.3)		0,001
Total	24,643	100,0	11,448	100,0	



Infected hip hemiarthroplasties and total hip arthroplasties: Differential findings and prognosis



Jaime Lora-Tamayo^{a,*}, Gorane Euba^a, Albi Oscar Murillo^a, Salvador Pedrero^b, Dolores Miquel Pujol^a, Xavier Cabo^b, J. Ariza^a

Summary Objectives: Infected hip hemiarthroplasties (HHA) are classically analyzed along with infected total hip arthroplasties (THA), but patients with either one or other device are different. We describe the clinical presentation, etiology and prognosis of infected HHA compared with infected THA.

Methods: Comparative study of patients with infected HHA and THA from a prospective database of prosthetic joint infection (PJI) cases in our hospital (2003–2011), focusing on patients managed with debridement, antibiotics and implant retention (DAIR).

Results: 210 episodes of hip-PJI (age 74 years, 63% women): 62 (39%) HHA and 148 (61%) THA. HHA-patients were older and had more comorbidities. Late-chronic and hematogenous infections were more frequent in THA. 123 (59%) patients were managed with DAIR: 72 THA and 51 HHA. *Staphylococcus aureus* was more frequent in THA (44% vs 26%, $p = 0.032$), while Gram-negative bacilli were more prevalent in HHA (73% vs 51%, $p = 0.018$), with a higher prevalence of fluoroquinolone-resistance in cemented-HHA. Overall failure was 37%, with no significant differences among groups. A higher mortality was observed in HHA cases (21% vs 4%, $p = 0.005$), particularly in cemented-HHA.

Abstract

We have used a medical database to analyze our activity since 2005. We observed a frequent association between bone and joint infection (BI) and bacteremia. Our aim was to characterize patients with BI and bacteremia, and focus on the outcome.

Patients and method. – Our database includes the prospective recording of 28 characteristics of all hospitalized patients, including diagnosis, comorbid conditions, microbiological data, therapy, and outcome. We selected patients presenting with BI in this database, from July 2005 to December 2012. Fever before blood culture was retrospectively documented from the patient's chart. Chronic BI was defined as a disease lasting more than 1 month. An unfavorable outcome was defined by the need for intensive care or death.

Results. – Six hundred and thirty-two patients presented with BI and 125 with bacteremia (19.8%). We used a stepwise logistic regression analysis and determined that bacteremia was associated with vertebral osteomyelitis, OR, 3.97, $P < 0.001$; alcohol abuse, OR, 2.51, $P = 0.010$; fever, OR, 2.43, $P < 0.001$; neurological and/or psychiatric diseases, OR, 2.41, $P \leq 0.001$; and *Staphylococcus aureus* infection, OR, 2.32, $P < 0.001$. The outcome was unfavorable in 23 cases (3.6%), associated with bacteremia, OR, 8.00, $P < 0.001$, age > 60 years, OR, 4.78, $P = 0.018$, and *S. aureus* infection, OR, 3.96, $P = 0.010$. No single comorbid condition was significantly associated with an unfavorable outcome.

Conclusion. – Bacteremia occurred in nearly 20% of the patients presenting with BI, and was associated with identifiable comorbid conditions; it was the main risk factor for an unfavorable outcome.

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RESEARCH ARTICLE

Open Access

Morbidity
arthritis: aJulien Ferrand¹, Yous
Alice Séjourné¹, Jean-

Abstract

Background: The of
patients with confir**Methods:** All adult p
with confirmed SA v
analysis was perform**Table 5** Univariate analysis of factors possibly associated with mortality attributable directly to septic arthritis

	Yes (N=6)	No (N=101)	p-value	Odds ratio [95 % CI]	Univariate analysis p-value
Age (years)	82.5 [59–96]	62.0 [16–95]	0.017	1.09 [1.02–1.19]	0.023
Gender (Female)	3 (50 %)	31 (31 %)	0.380	2.26 [0.40–12.80]	0.335
Knee involvement	3 (50 %)	22 (22 %)	0.138	3.59 [0.63–20.61]	0.133
Hip involvement	0 (<1 %)	12 (12 %)	1	not defined	0.993
Multiple joint involvement	2 (33 %)	8 (8 %)	0.097	5.81 [0.73–35.11]	0.062
Cardiovascular disease	3 (50 %)	42 (42 %)	0.694	1.40 [0.25–7.91]	0.686
Skin involvement	4 (67 %)	12 (12 %)	0.004	14.83 [2.62–115.71]	0.003
Rheumatoid arthritis and related conditions	2 (33 %)	5 (5 %)	0.049	9.60 [1.14–64.04]	0.021
Previous cancer	3 (50 %)	19 (19 %)	0.100	4.32 [0.75–24.95]	0.087
Diabetes mellitus	4 (67 %)	22 (22 %)	0.030	7.18 [1.31–54.31]	0.028
Time to presentation (days)	11 [4–24]	7 [0–120]	0.695	0.98 [0.92–1.02]	0.507
Confusion on admission	3 (50 %)	10 (10 %)	0.023	9.10 [1.51–55.39]	0.012
Creatinine clearance (MDRD, ml/min)	32 [23–66]	81 [5–150]	0.003	0.96 [0.92–0.99]	0.009
C-reactive protein (mg/l)	375 [88–640]	120 [3–465]	0.003	1.01 [1.006–1.02]	0.002
<i>Staphylococcus aureus</i>	4 (67 %)	53 (58 %)	1	1.47 [0.27–11]	0.665
Joint surgery	1 (17 %)	57 (56 %)	0.091	0.15 [0.01–1.002]	0.093
Bacteraemia	5 (83 %)	25 (25 %)	0.006	15.20 [2.31–298.70]	0.015
Small joint involvement	0 (<1 %)	32 (32 %)	0.175	not defined	0.993

MDRD Modification of Diet in Renal Disease
Statistically significant results are indicated in bold type

ORIGINAL ARTICLE

Surgical Site Infection After Primary Hip and Knee Arthroplasty:
A Cohort Study Using a Hospital DatabaseLeslie Grammatico-Guillon, MD, PhD;¹ Sabine Baron, MD;² Philippe Rosset, MD, PhD;³ Christophe Gaborit, Statistical Engineer;²
Louis Bernard, MD, PhD;⁴ Emmanuel Rusch, MD, PhD;¹ Pascal Astagneau, MD, PhD⁵**BACKGROUND.** Hip or knee arthroplasty infection (HKAI) leads to heavy medical consequences even if rare.**OBJECTIVE.** To assess the routine use of a hospital discharge detection algorithm of prosthetic joint infection as a novel additional tool for surveillance.**METHODS.** A historic 5-year cohort study was built using a hospital database of people undergoing a first hip or knee arthroplasty in 1 French region (2.5 million inhabitants, 39 private and public hospitals): 32,678 patients with arthroplasty code plus corresponding prosthetic material code were tagged. HKAI occurrence was then tracked in the follow-up on the basis of a previously validated algorithm using *International Statistical Classification of Disease, Tenth Revision*, codes as well as the surgical procedures coded. HKAI density incidence was estimated during the follow-up (up to 4 years after surgery); risk factors were analyzed using Cox regression.**RESULTS.** A total of 604 HKAI patients were identified: 1-year HKAI incidence was 1.31%, and density incidence was 2.2/100 person-years in hip and 2.5/100 person-years in knee. HKAI occurred within the first 30 days after surgery for 30% but more than 1 year after replacement for 29%. Patients aged 75 years or older, male, or having liver diseases, alcohol abuse, or ulcer sore had higher risk of infection. The inpatient case fatality in HKAI patients was 11.4%.**CONCLUSIONS.** The hospital database method used to measure occurrence and risk factors of prosthetic joint infection helped to survey HKAI and could optimize healthcare delivery.*Infect. Control Hosp. Epidemiol.* 2015;36(10):1198–1207



Prosth

Infection de **Abstract**

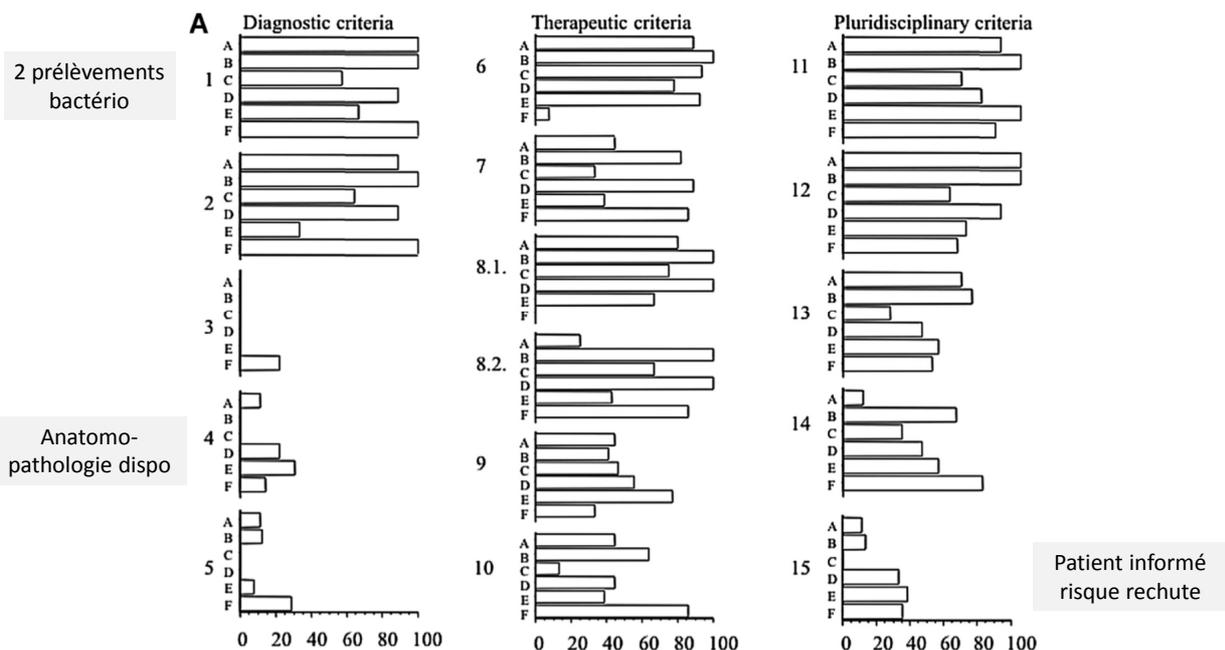
Background. – Care to patients with prosthetic joint infections (PJI) is provided after pluridisciplinary collaboration, in particular for complex presentations. Therefore, to carry out an audit in PJI justifies using pluridisciplinary criteria. We report an audit for hip or knee PJI, with emphasis on care homogeneity, length of hospital stay (LOS) and mortality.

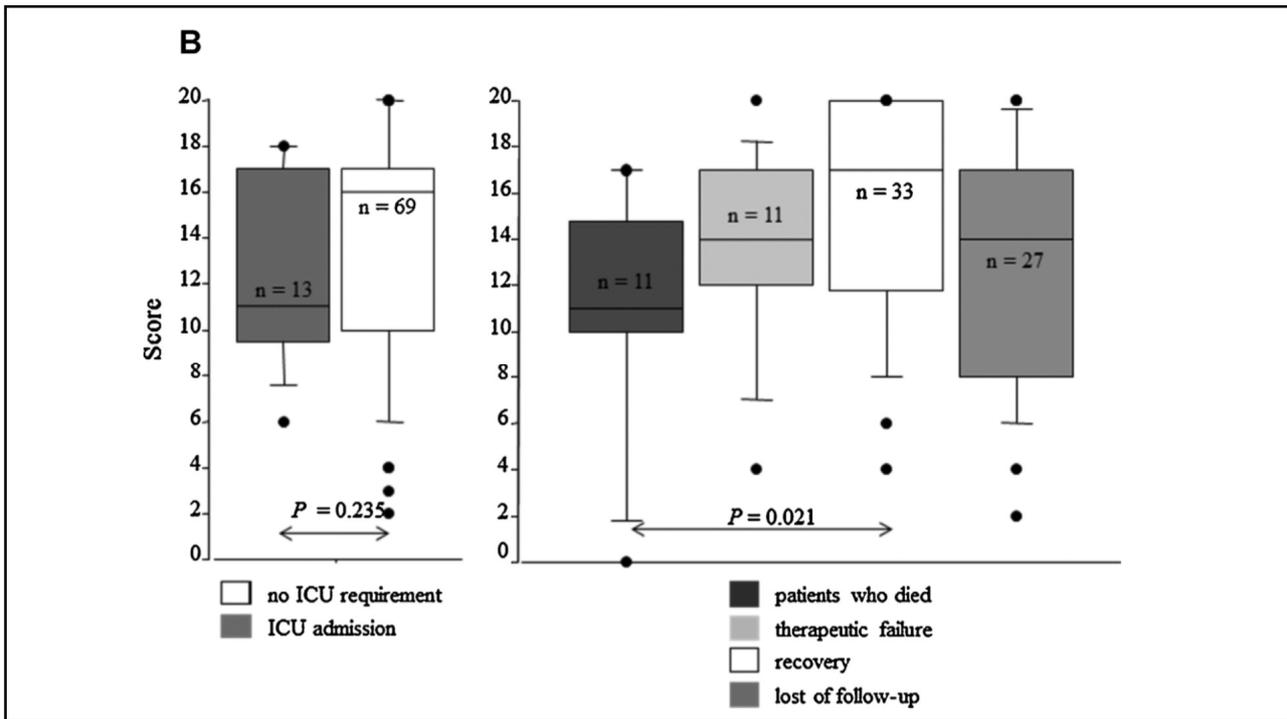
Patients and methods. – Fifteen criteria were chosen for quality of care: 5 diagnostic tools, 5 therapeutic aspects, and 5 pluridisciplinary criteria. Among these, 6 were chosen: surgical bacterial samples, surgical strategy, pluridisciplinary discussion, antibiotic treatment, monitoring of antibiotic toxicity, and prevention of thrombosis. They were scored on a scale to 20 points. We included PJI diagnosed between 2010 and 2012 from 6 different hospitals. PJI were defined as complex in case of severe comorbid conditions or multi-drug resistant bacteria, or the need for more than 1 surgery.

Results. – Eighty-two PJI were included, 70 of which were complex (85%); the median score was 15, with a significant difference among hospitals: from 9 to 17.5 points, $P < 0.001$. The median LOS was 17 days, and not related to the criterion score; 16% of the patients required intensive care and 13% died. The cure rate was 41%, lost to follow-up 33%, and therapeutic failure 13%. Cure was associated with a higher score than an unfavorable outcome in the univariate analysis (median [range]): 16 [9–18] vs 13 [4–18], $P = 0.002$.

Conclusions. – Care to patients with PJI was heterogeneous, our quality criteria being correlated to the outcome.

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Table 2

Adverse event (AE) rate of the different antibiotic associations used for staphylococcal bone and joint infections.

	RF + FQ ^a	RF + CD ^b	FQ + CD ^c	Others ^d
Hospitalization	89 (37%)	33 (14%)	23 (10%)	93 (39%)
Prescriptions n (%)	20	3	1	17
AE (n)	22%	9%	4%	18%
Rate	89 (37%)	33 (14%)	23 (10%)	93 (39%)
Ambulatory care				
Prescriptions n (%)	68 (29%)	32 (13%)	27 (11%)	111 (47%)
AE (n)	4	3	2	12
Rate	6%	9%	7%	11%
Overall rate	15%	9%	6%	14%
System organ class affected by the AE				
Gastrointestinal disorders	9	4	0	12
Hepatobiliary disorders	5	0	0	6
Skin disorders	3	0	2	3
Musculoskeletal disorders	3	0	0	2
Renal disorders	1	1	1	1
Hematological	0	0	0	4
Nervous system disorders	1	0	0	0
General disorder ^e	1	0	0	0
Others	1	1	0	1

^a Rifampin and fluoroquinolones.

^b Rifampin and clindamycin.

^c Fluoroquinolones and clindamycin.

^d Others antibiotics association.

^e General disorder refers to fever. Classification of adverse events was the Common Terminology Criteria for Adverse Events version 4.0.



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Complex prosthetic joint infections due to carbapenemase-producing *Klebsiella pneumoniae*: a unique challenge in the era of untreatable infections*

Jorgelina de Sanctis^{a,b,c,*}, Lucileia Teixeira^{a,b,c}, David van Duin^{a,b,c}, Camila Odio^d, Geraldine Hall^{a,b,c}, J. Walton Tomford^{a,b,c}, Federico Perez^{e,f,g}, Susan D. Rudin^e, Robert A. Bonomo^{e,f,g,h,i}, Wael K. Barsoum^j, Michael Joyce^l, Viktor Krebs^l, and Steven Schmitt^{a,b,c}

^aDivision of Infectious Disease, Spectrum Health Medical Group, 230 Michigan Ave, NE, Grand Rapids, MI 49503, USA

^bSection of Bone and Joint Infections, Department of Infectious Diseases, Cleveland Clinic Foundation, Cleveland, Ohio, USA

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Table 1

Characteristics and clinical outcomes of cases of prosthetic joint infection caused by carbapenem-resistant *Klebsiella pneumoniae*

Variable	Case 1	Case 2	Case 3
Age (years), sex	58, male	72, male	70, female
Comorbidities	Osteoarthritis, diabetes	Osteoarthritis, coronary artery disease, congestive heart failure	RA on immunosuppression with methotrexate and hydroxychloroquine
Onset of first PJI (months from index surgery)	60	36	1
Primary organism PJI	MSSA	VSE, VRE, <i>Proteus mirabilis</i>	<i>Corynebacterium sp</i> and VSE
Onset of CRKP PJI (months from first PJI)	2	2	5
Number of procedures (<i>n</i>)	10	12	57
Antibiotics	Oxacillin; piperacillin–tazobactam; daptomycin and oral doxycycline; tigecycline and fluconazole; colistin, amikacin, and tigecycline	Ciprofloxacin, linezolid, and rifampin; daptomycin and ciprofloxacin; vancomycin and tigecycline → doxycycline; oxacillin, oxacillin and tigecycline → doxycycline	Vancomycin; tigecycline; colistin; tigecycline; tigecycline; tigecycline and vancomycin → oral ciprofloxacin and clindamycin; tigecycline; colistin; tigecycline, and amikacin; ciprofloxacin
WBC $\times 10^9/l$ (median (IQR))	9.07 (0.63, 12.49)	8.45 (7.73, 9.75)	8.92 (7.40, 11.68)
Hospital LOS (days)	51	101	225
Hospitalization costs (\$)	N/A	N/A	850 000
Functional status	Above-the-knee amputation	Full	Disarticulated
Outcomes	Died	Died	Alive with major disability

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Prevention of Periprosthetic Joint Infection

Maryam Rezapoor, MS, Javad Parvizi, MD, FRCS

The Rothman Institute at Thomas Jefferson University Hospital, Philadelphia, Pennsylvania

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ABSTRACT

Periprosthetic joint infection (PJI) has moved into the first place as the cause of failure following total knee arthroplasty (TKA). Recent studies have shown that PJI results in higher mortality in patients than many cancers. The economic burden of treating PJI is likely to exceed \$1 billion this year in the US. Thus, it is paramount that all efforts are invested to prevent this dreaded complication after total joint arthroplasty (TJA). This article summarizes some of the most effective and proven strategies for prevention of PJI. It is hoped that the article will be of benefit to the readers of the journal.

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Discussion

- Morbi-mortalité des IOA: peu de données, hétérogènes
- Mortalité globale ~ 10%
- Morbidité imprécise, qualité de vie altérée
- Au sein du Réso moyens partagés d'amélioration des pratiques cliniques:
prélèvements microbiologiques, protocoles d'antibiothérapies, expériences RCP

Nouvel audit pour objectiver une amélioration du pronostic ?