

# Treatment of septic osteoarthritis of the hand, outpatient surgery versus conventional hospitalization: a comparative prospective study

Congrès du GEM

Vendredi 20 décembre 2019

Pierre VULLIET, Rebecca DELARUE, Marie Paule  
GERLINGER, Jérôme PIERRART, Emmanuel  
MASMEJEAN

Aucun conflit d'intérêt



# Introduction

---

---

- Ostéo-arthrititis : common but **not often described**
- 2015 GEM congress and literature : **no consensus**
- Today : with the growing of outpatient surgery, it seemed important to confirm the non-inferiority of it in hand Infections.



# Methods

---

---

- **Bicentric study** : HEGP et SOS Mains Lille
- **Prospective and observational,**
- From October 2015 to January 2017

➔ Patients repartition : Outpatient surgery (CA) or hospitalization (HC)



# Methods

---

---



## Inclusion

- >15 ans et 3 mois,
- Hand osteo-arthritis



## Non inclusion

- Outpatient surgery  
Contraindications
- Patient refuse to participate
- Antecedents of immunosuppression, diabetes, arteriopathy, micro-angiopathy
- General signs of sepsis
- Regional inflammatory signs
- Wrist arthritis
- Pyogenic flexor tenosynovitis stage 3

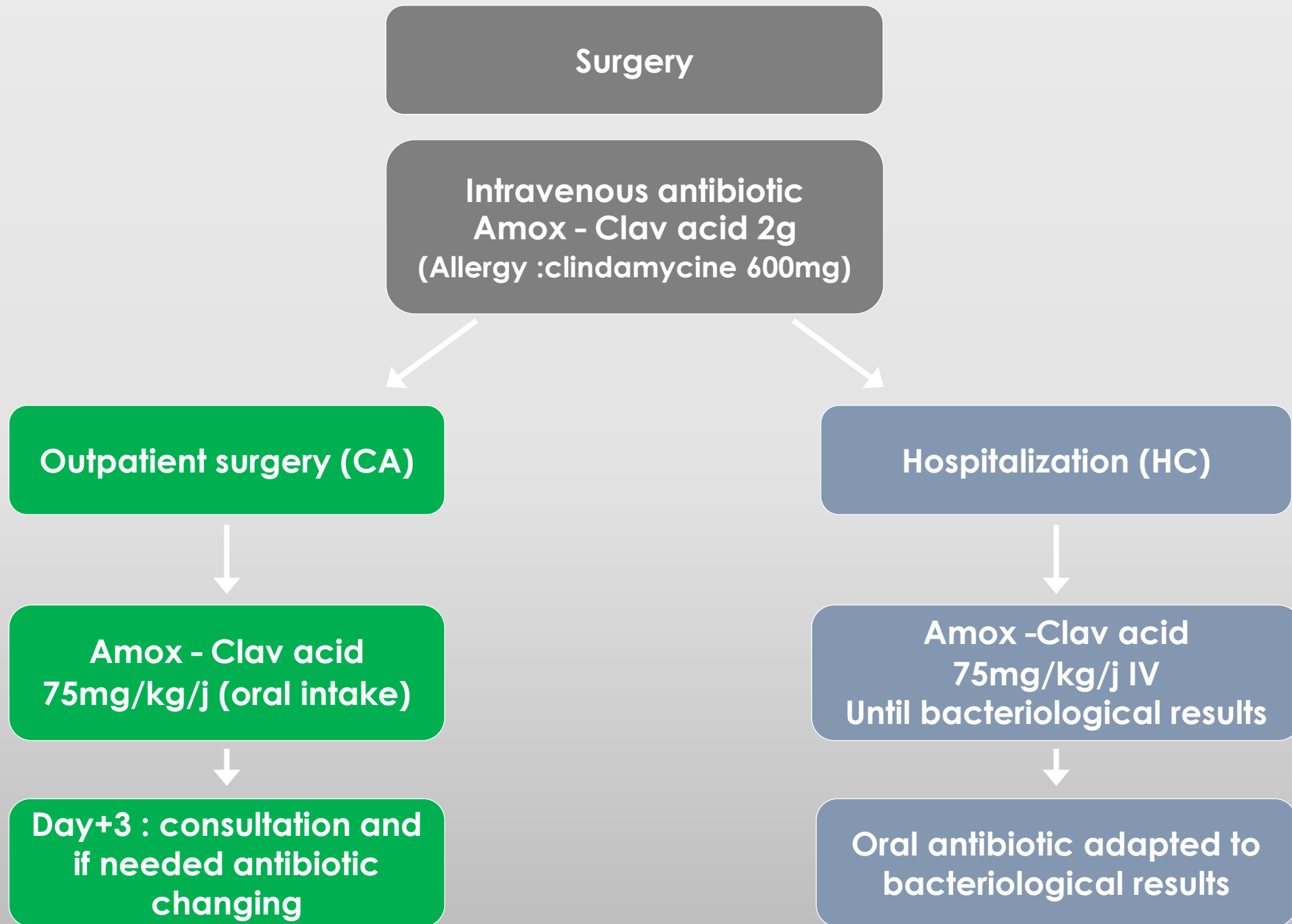
# Methods

---

**Ostéo-  
arthritis**



Synovectomy, lesional assessment (bone loss, cartilage), bacteriological samples, washing and loose sutures



**Surgery**

**Intravenous antibiotic  
Amox - Clav acid 2g  
(Allergy :clindamycine 600mg)**

**Outpatient surgery (CA)**

**Amox - Clav acid  
75mg/kg/j (oral intake)**

**Day+3 : consultation and  
if needed antibiotic  
changing**

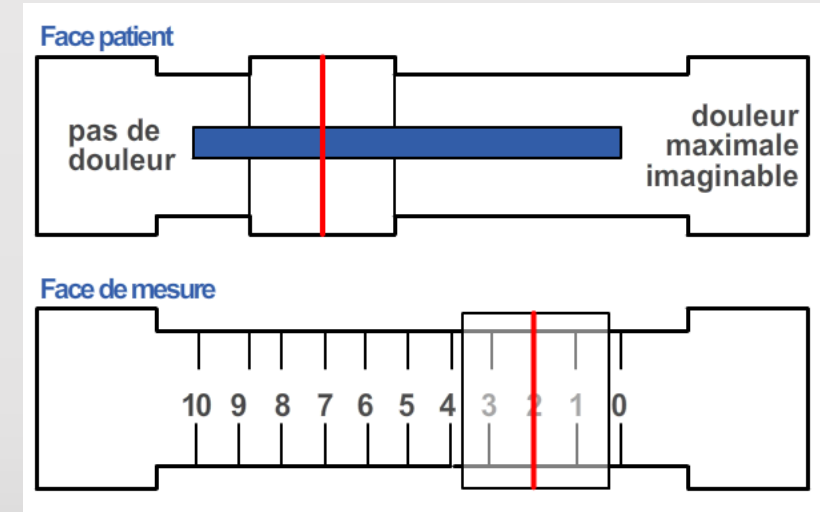
**Hospitalization (HC)**

**Amox -Clav acid  
75mg/kg/j IV  
Until bacteriological results**

**Oral antibiotic adapted to  
bacteriological results**

# Methods

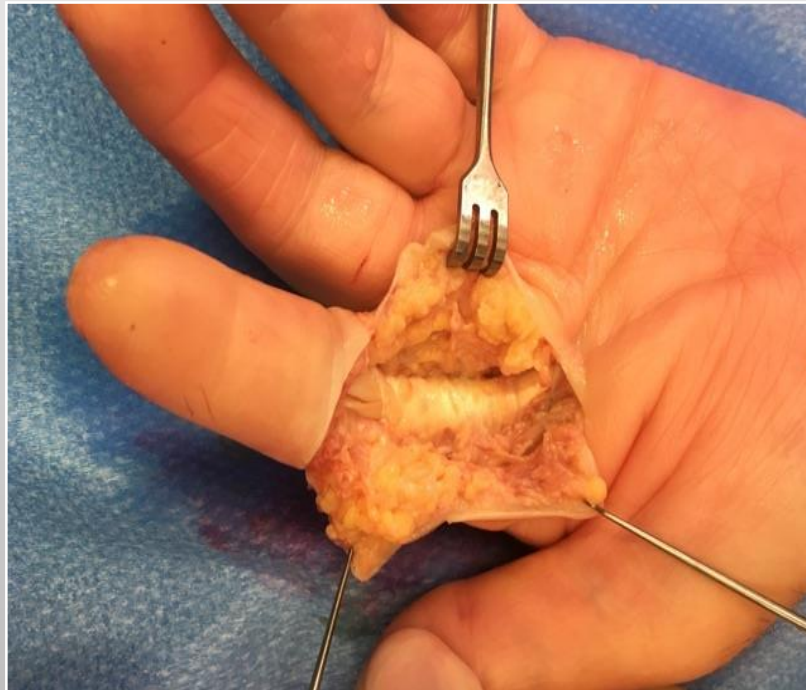
- Post-operative care :
  - **Mobilisation +++ with physiotherapist**
  - **Antiseptic bath (Betadine)**
- Post-operative follow-up :
  - **Clinical follow-up** (D1, D3, D7, D15, D21, D45)
    - Pain
    - Mobility
    - Time for healing and for recovering work related activities
    - QuickDash
  - **Biological follow-up** (D2, D10, D18) : hepatic function, inflammatory markers (CRP), complete blood count
  - **Radiological follow-up** : D45



# Methods

---

Primary outcome :  
**Revision surgery** for uncontrolled sepsis





# Results

Caractéristiques	HC	CA	P-values
Nombre de patients	25	23	>0,05
Sex ratio (H/F, Nb)	17 / 8	19 / 4	>0,05
Âge moyen (Ans)	49,4	36,0	0,01
Atteinte main dominante	14 (56,0%)	14 (60,9%)	>0,05
Tabagisme actif	11 (44,0%)	10 (43,5%)	>0,05
Profession manuelle	8 (32,0%)	9 (39,1%)	>0,05
<i>Lésions</i>			
- Ostéite	3	1	
- Arthrite	14	21	
- Ostéo-arthrite	8	1	
<i>Signes radiologiques</i>	10	2	0,01
- Chondrolyse	4	0	
- Ostéolyse	7	2	

# Results

- **Revision surgery** ( $p=0,01$ ) :
  - **Hospitalization group (HC): 9 patients** with revision surgery (36%), including 3 who had a flexor pyogenic tenosynovitis combined
  - **Outpatient group : only 1 patient** needed surgery again (4,3%)
- **Factors statistically associated with revision surgery** :
  - **Age** ( $p=0,006$ )
  - **Preoperative radiologic signs** ( $p<0,05$ )
  - **Secondary antibiotic change** ( $p<0,001$ )



# Results

	HC	CA	P-values
Distance pulpe-paume (cm)	2,0cm $\pm$ 2,3	0,9cm $\pm$ 2,1	0,04
Délai moyen cicatrisation (jours)	23,5 $\pm$ 17,0	23,5 $\pm$ 17,0	>0,05
Délai reprise activités (jours)	43,6 $\pm$ 23,8	26,6 $\pm$ 24,6	0,03
EVA douleur	1,7/10 $\pm$ 2,4	0,4/10 $\pm$ 1,0	>0,05
QuickDash	11,1% $\pm$ 17,6	5,7% $\pm$ 10,3	>0,05
Signes radiologiques à J45	15	3	<0,001

# Conclusion

*Proposition de prise en charge*

