APPAC
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Angioplaste ambulatoire: Bilan de 10 ans de pratique

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DÉCLARATION DE LIENS D'INTÉRÊT AVEC LA PRÉSENTATION

Intervenant : Emmanuel Teiger, Créteil

☑ Je n'ai pas de lien d'intérêt à déclarer

Limitations of ambulatory PCI ?

2-25% occlusion after balloon angioplasty → stents

Coronary occlusion

stent thrombosis

- Clinical setting (SCA, IC, IRC)
- Pharmacological environment
- Procedural result

Complications

Access site bleeding

Femoral access → Radial Access

A long way from previous PCI

- Laarman et al. Br Heart J 1994;72:12-5

Ambulatory PCI by balloon » 61 patients (simple lesions)

- [illegible]

A pilot study of coronary angioplasty in outpatients

Gerrit J Laarman, Ferdinand Kiemeneij, L Ron van der Wieken, Jan G P Tijssen, Jo S M Suwarganda, Ton Slagboom

- Dalby et al. CCI 2003
- Zia *Br Heart J* 1994;72:12–15 3
- Slagboom et al. CCI 2005
- Lasevitch et al. Am J Cardiol 2005

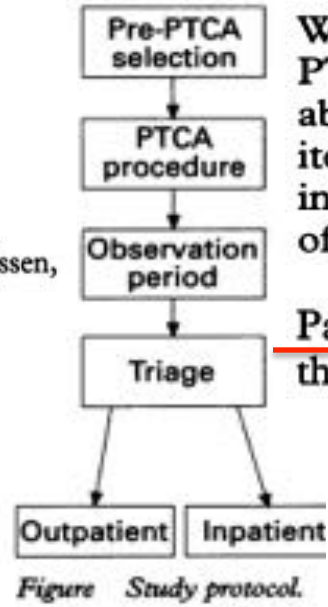

Figure Study protocol.

We selected patients at limited risk from PTCA. They had stable angina pectoris, suitable (non-complex) lesion morphology, a limited region at risk (to prevent haemodynamic instability and a large infarction in the event of late closure of the vessel). Hence we

Patients were observed for two hours close to the catheterisation laboratory. Then they

In this study the clinical course of all patients referred to the outpatient group was uneventful. The results (95% confidence

- Bertrand et al. Circulation 2006; 114:2636-2643
- Heyde et al. Circulation 2007;115:2299-2306

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Same-Day Discharge After Percutaneous Coronary Intervention

A Meta-Analysis

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James A. de Lemos, MD,† Dharam J. Kumbhani, MD, SM†

Stanford, California; and Dallas, Texas

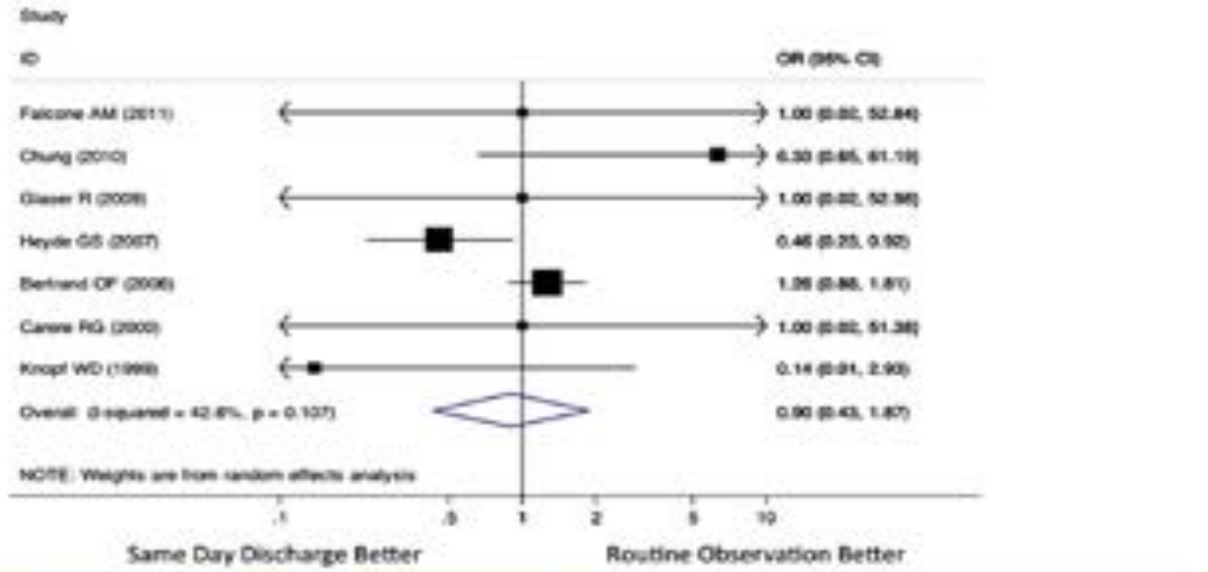

Figure 2 Pooled Estimate of Composite Endpoint of Death, MI, TLR in RCTs

CI = confidence interval; MI = myocardial infarction; OR = odds ratio; RCTs = randomized controlled trials; TLR = target lesion revascularization.

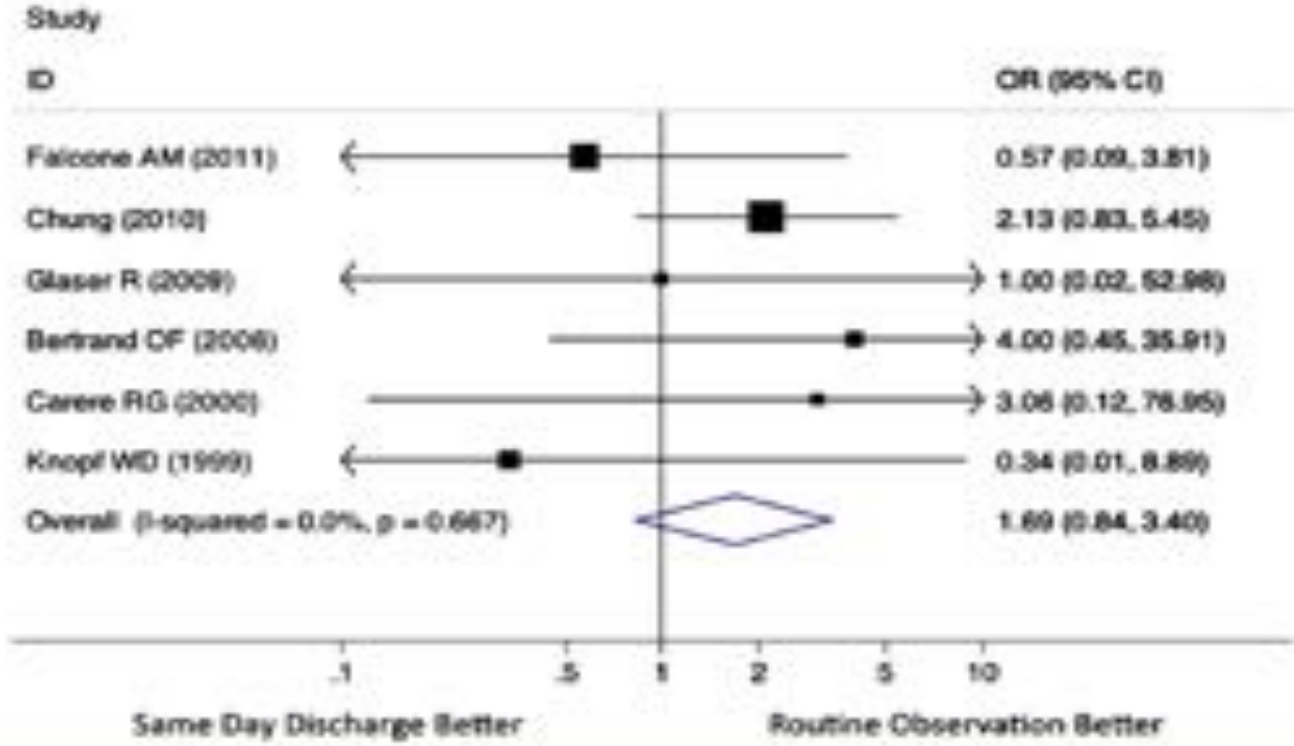

Figure 3 Pooled Estimate of Composite Endpoint of Major Bleeding, Vascular Complications in RCTs

Abbreviations as in Figure 2.

Mondor experience

- Out patients for coronarographies since 2005 : 900 pts / year (which represents 1/3 of the pts); 40-50 % of them had PCI.
- Radial approach for almost all pts
- Ambulatory PCI experience began in 2006 : 250 pts /year were screened in a pilot safety study (overnight stay).
- Pts stayed 1 night in the hospital: no events in this cohort of selected pts

Mondor experience

- In 2007 we began a prospective study aimed at assessing the safety in the real life and the economic interest of this approach.
- Evaluation in 3 hospitals.(Mondor, Lagny, Pitié Salpétrière)
- Primary end point: rehospitalisation rate within 18h following discharge
- Medico- Economic impact
- stent thrombosis <H18-24
- bleeding and vascular complications at puncture site <H18
- quality of life
- substudy with platelets agregability testing (Verify Now)

Ambulatory Transradial Percutaneous Coronary Intervention: A Safe, Effective, and Cost-Saving Strategy

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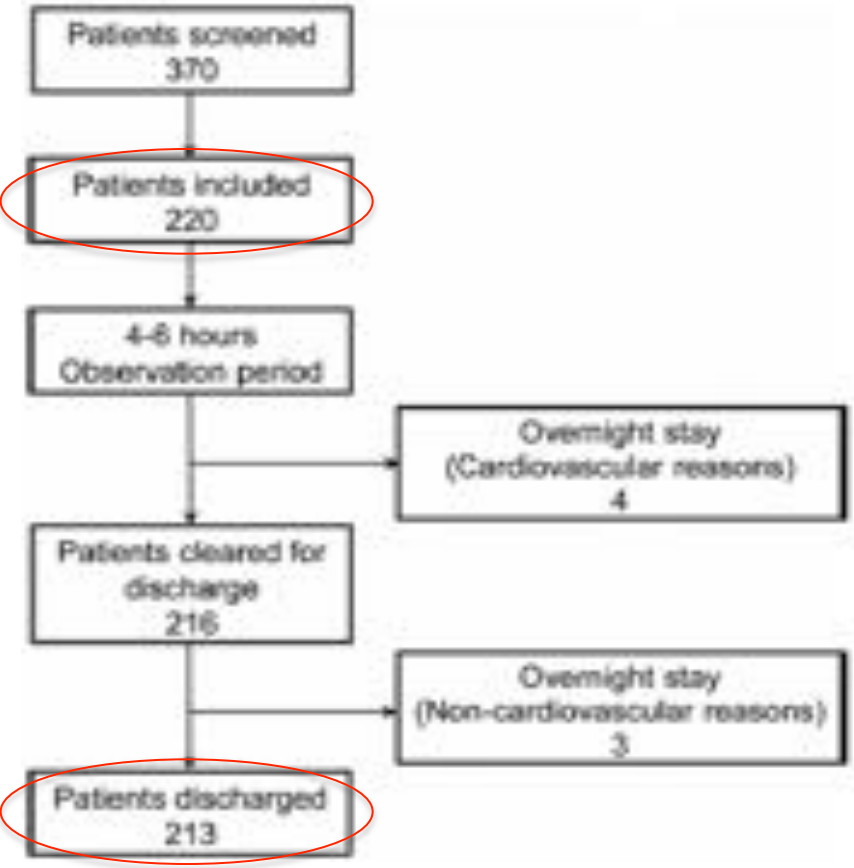


TABLE IV. Follow Up Data 24 hr and 1 Month After Ambulatory Percutaneous Coronary Intervention

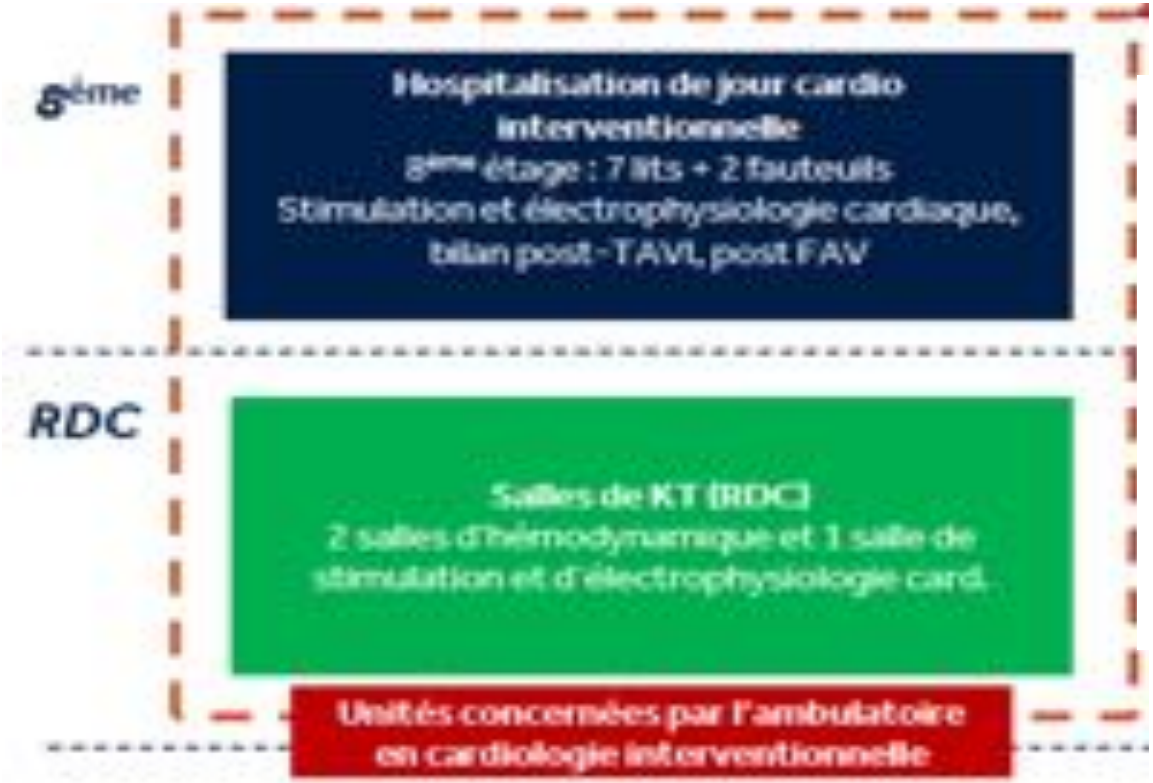
	24 hr ($n = 213$)	1 month ($n = 213$)
Any MACCE	0 (0)	1 (0.5)
Death, *n* (%)	0 (0)	0 (0)
Myocardial infarction, *n* (%)	0 (0)	1 (0.5)
Cardiac surgery, *n* (%)	0 (0)	0 (0)
Repeat PCI, *n* (%)	0 (0)	0 (0)
Stroke, *n* (%)	0 (0)	0 (0)
Readmission, *n* (%)	0 (0)	4 (1.9)
Seek medical care without readmission, *n* (%)	0 (0)	7 (3.3)
Markers of myocardial injury		
CPK > 2 times the upper limit, *n* (%)	1 (0.5)	na
Troponin I > upper limit, *n* (%)	69 (33.5)	na
Troponin I > 3 times the upper limit, *n* (%)	43 (20.9)	na
Troponin I >1 μg/L, *n* (%)	11 (5.3)	na

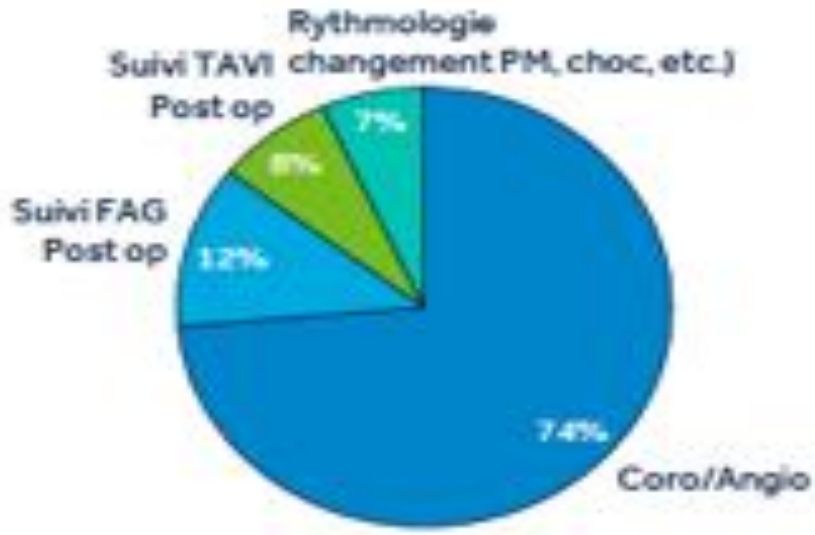
Le Corvoisier et al. Catheterization and Cardiovascular Interventions 2013

RESULTS

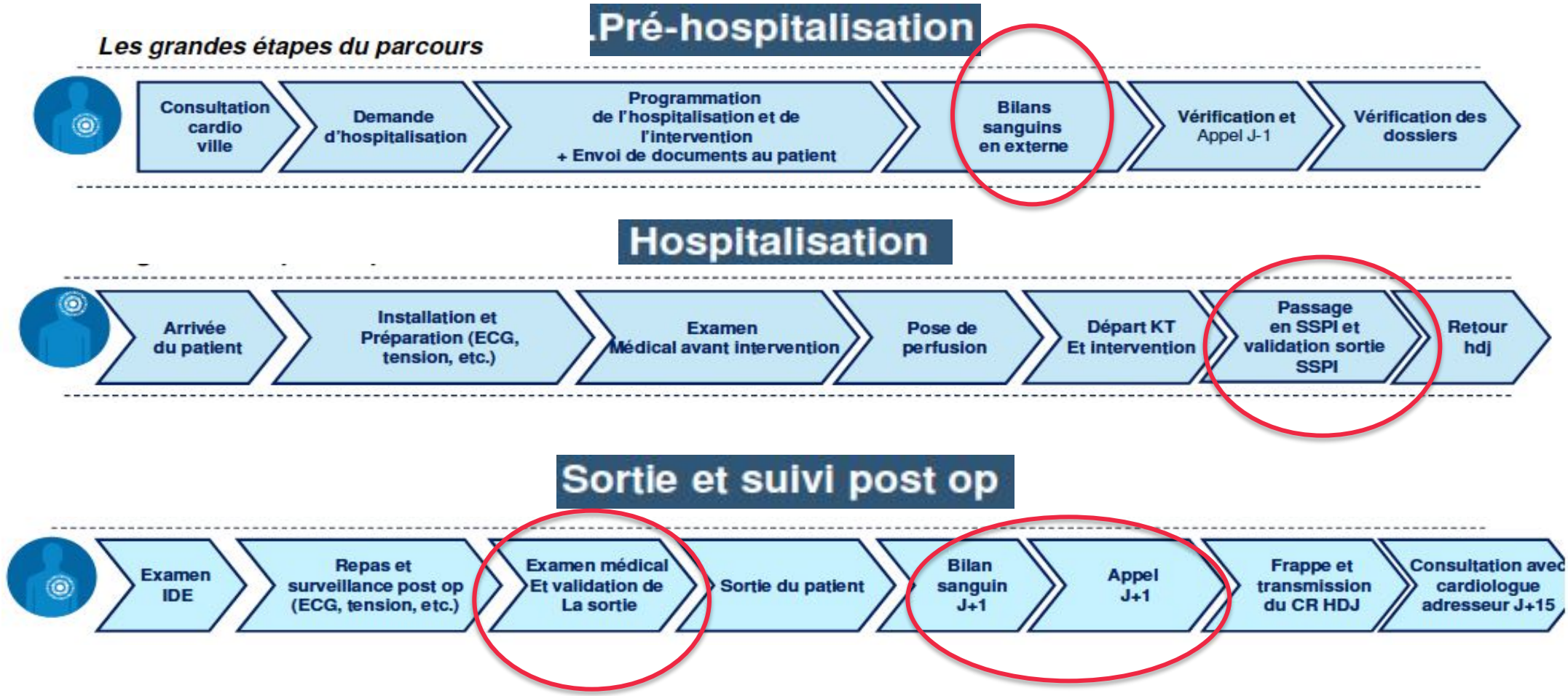
Delayed discharge for medical reasons, n (%)	**4 (1.8)**
Urgent repeat PCI, n (%)	**0**
Radial haematoma, n (%)	**1 (0.9)**
Chest pain, n (%)	**2 (0.9)**
ECG changes, n (%)	**1 (0.9)**
Delayed discharge for non-medical reasons, n (%)	**3 (1.4)**

Organization of the ambulatory angiography and PCI

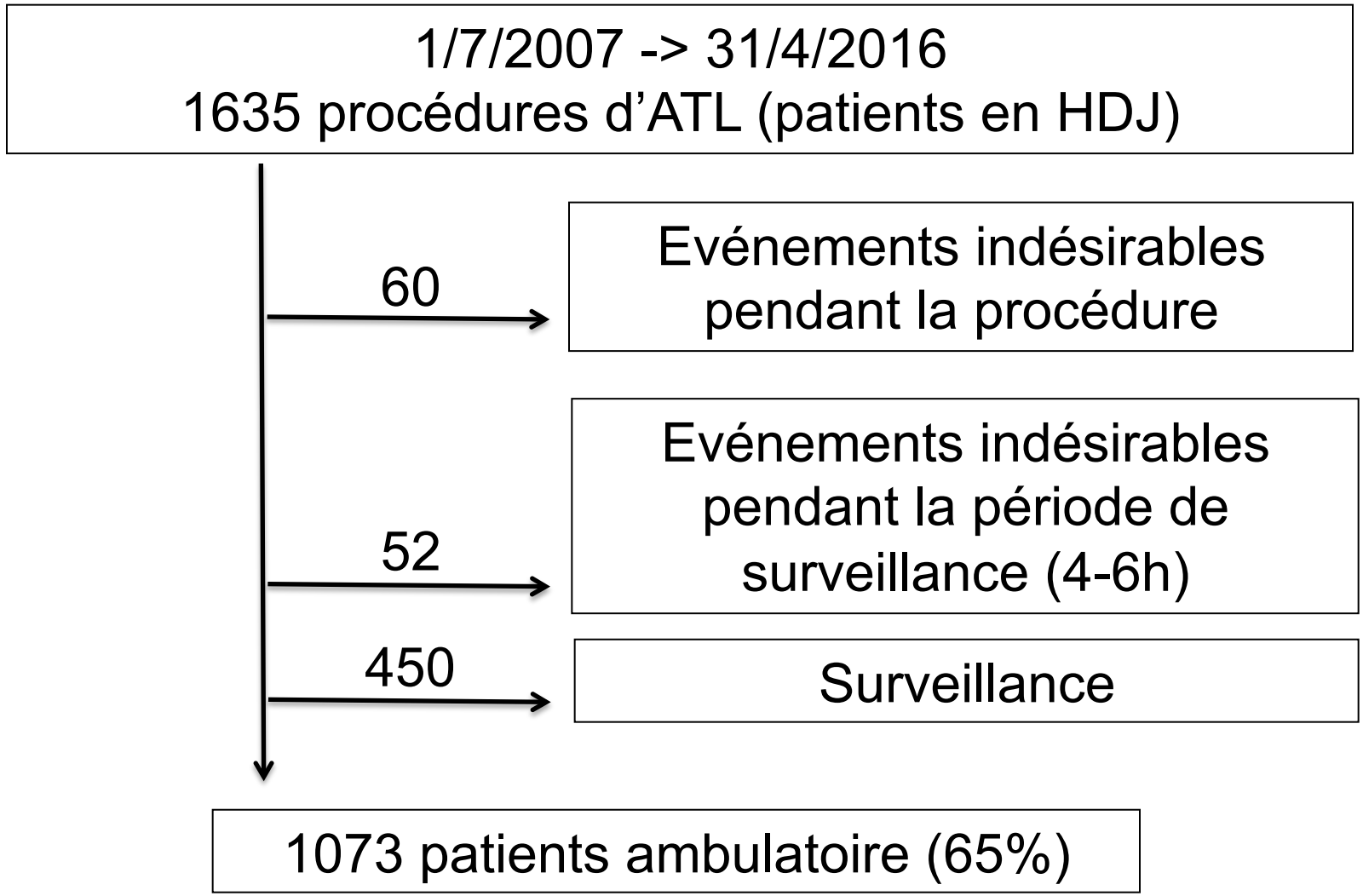




Organization of the ambulatory angiography and PCI



Analyse patients avec ATL ambulatoire



Résultats 1

	Ambulatoire (n=1073)
Age *(moyenne)*	62 ± 40
Rapport H/F (%)	88
IMC	27,2 ± 4,4
Hérédité (%)	19
HTA (%)	56
Diabète (%)	30
Tabagisme (%)	50
Dyslipidémie (%)	59
ATCD Angioplastie (%)	44,1
ATCD Pontages (%)	6,1
Indication examen	
Angor stable (%)	83
Angor instable (%)	1,6
Ischémie silencieuse (%)	13,3
ATL post SCA (%)	2,1

Voie d'abord radiale	97
Taille désilet artériel	
5 Fr (%)	29
6 Fr (%)	71
7 Fr (n)	1
Fermeture: TR-Band / Compression manuelle (%)	31/69
Fermeture artérielle voie fémorale	
Système de fermeture (%) (Perclose, Angio/Femoseal,	81
Compression manuelle (%)	19
Voie d'abord secondaire (%)	1,5

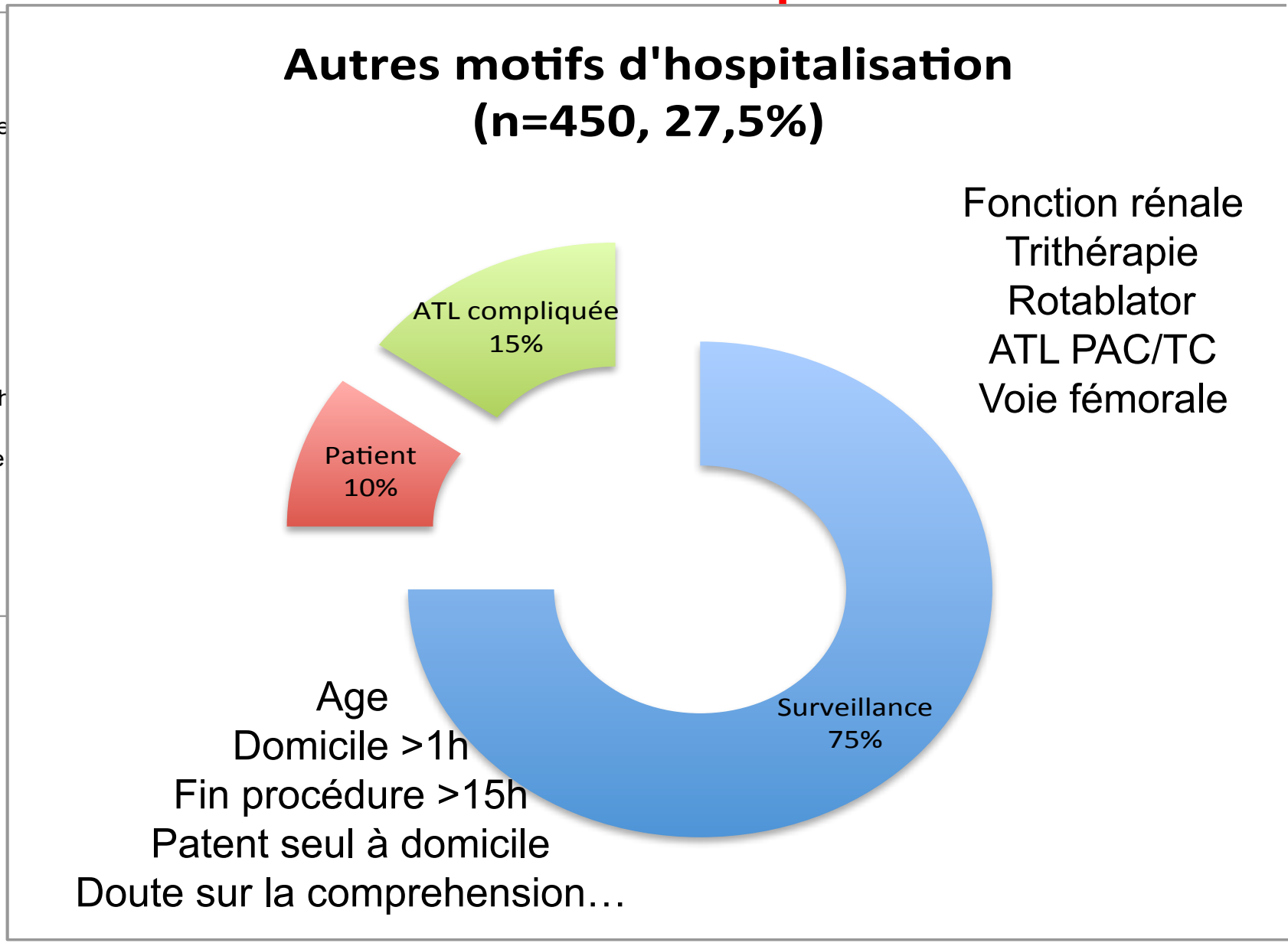
Angioplastie ad hoc (%)	91
Durée (min) *(n= 205, moyenne, médiane)*	42 ± 20, 40
AirKerma (mGy) *(n=364, moyenne, médiane)*	705 ± 876, 549
PDS total (cGy*cm^2) *(n=1531, moyenne, médiane)*	8873 ± 9825, 6603
Contraste (ml) *(n=1491, moyenne, médiane)*	175 ± 65, 160

Follow-up 24h

(1073 pts with ambulatory PCI within 10 years)

Decès	0
Rehospitalisation, n (%)	2 (0,19)
Motif cardiovasculaire	1
Autres raisons	1
Contrôle coronarographique	0
Complications voie d'abord	0
Hémorragie/autres saignements	0
Biologie de contrôle (24h)	
Troponine HS post ATL *(pg/ml) n=114 (vn < 14) (moyenne, écart type, médiane, range)*	130 ± 274, 47, 3-2055
CPK (UI/l) *n= 957 (vn < 195) (moyenne, écart type, médiane, range)*	130 ± 241, 94, 1-6657

Patients hospitalisés



Conclusions

1. L'angioplastie ambulatoire présente un faible risque de complications dans une population sélectionnée à condition d'avoir un résultat angiographique satisfaisant et en absence de complications pendant la période de surveillance.

2. L'analyse des événements à 24h dans une large cohorte de patients a confirmé la sécurité de la stratégie ambulatoire avec une absence de complications cardiaques et un taux de rehospitalisation très faible (2 patients/10ans).

There is No Place Like Home After Successful Percutaneous Coronary Intervention

Ian C. Gilchrist,* MD, FSCAI

Catheterization and Cardiovascular Interventions 74:1017–1018 (2009)

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