Is an Antithrombotic Therapy necessary after Mitral Valve Repair ?

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of the French Society of Cardiology

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Background

- MV repair is widely performed :
  - 46.5% of MR surgery in Europ[1]
- Compared with Mitral Valve Replacements, MVR Patients are :
  - Younger
  - Less Symptomatic
  - Recover a normal prognosis after surgery[2]

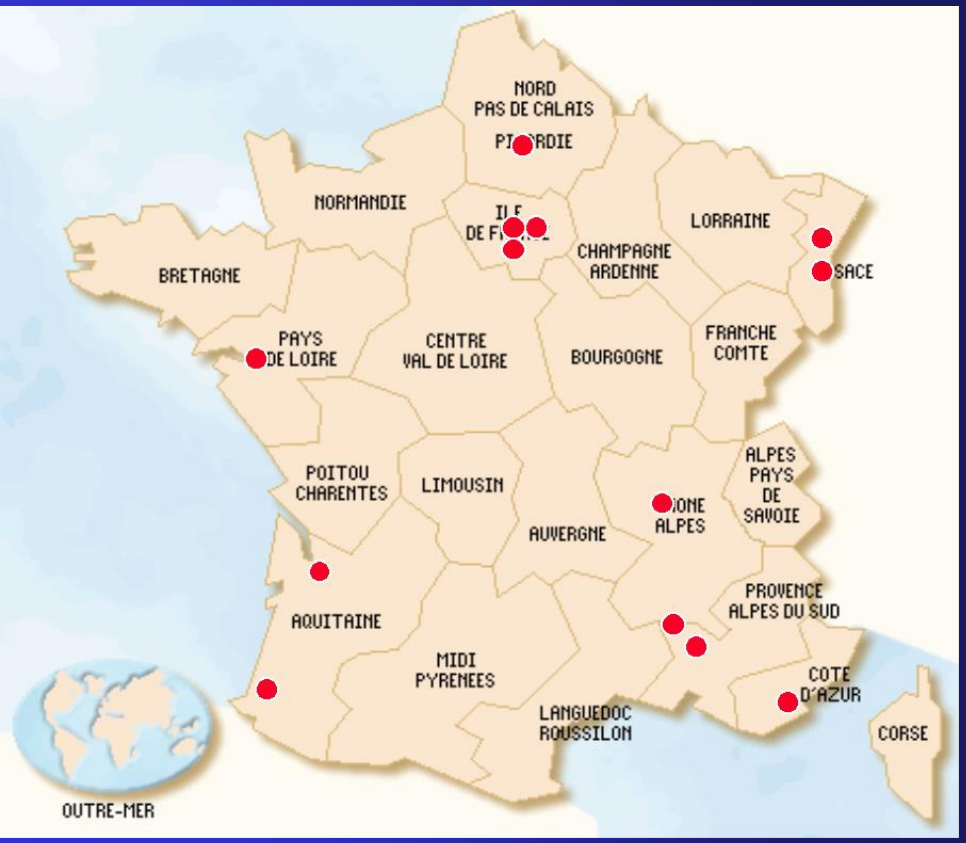
(1)Iung et al. The Euro Heart Survey on valvular heart Disease **Eur Heart J 2003**;24 : 1231-43.(2)**Braunberger** et al. very long term results (more than 20 years) of valve repair with carpentier's techniques in non rheumatic mitral valve insufficiency. **Circulation 2001** ; 104 (suppl I) : I-8-I-11

Antithrombotic Therapy after MVR : does these patients exist ?

- No Guideline[1.2.3]
- No Study

(1)Bonow et al. **ACC/AHA guidelines** for the management of patients with valvular heart disease.
J Am Coll Cardiol 1998; 31 :1486-1580
(2) Gohlke-Barwolf C et al.Guidelines for prevention of thromboembolic events in valvular heart disease.
Eur Heart J 1995; 16 : 1320-30
(3) Salem DN et al. Antithrombotic therapy in valvular heart disease.
Seventh **ACCP Conference** on Antithrombotic and Thrombolytic therapy.
Chest 2004; 126 : 457S

Prospective multicentric study (13 Centres, September 2002-July 2003)



Patients :

-Selection :

-every patient transferred to a Cardiac Rehabilitation Centre after MVR

-Endpoints :

-Thromboembolic and Haemorrhagic events at 6 weeks

Antithrombotic Therapy (AT)

- Vitamin K Antagonist (VKA) Group :
  - Heparin (high dose) started on Day 1
  - VKA started between Day 3 and Day 6
  - Heparin stopped when INR > 2
- Aspirin (ASA) Group
  - ASA started between day 2 and day 6
  - Heparin (low dose) stopped between day 5 and day 10
- No AT Group :
  - Heparin (low dose) stopped between day 5 and day 10

Results

Population

- N = 251; 57 ± 13 years old
- Men 74 %

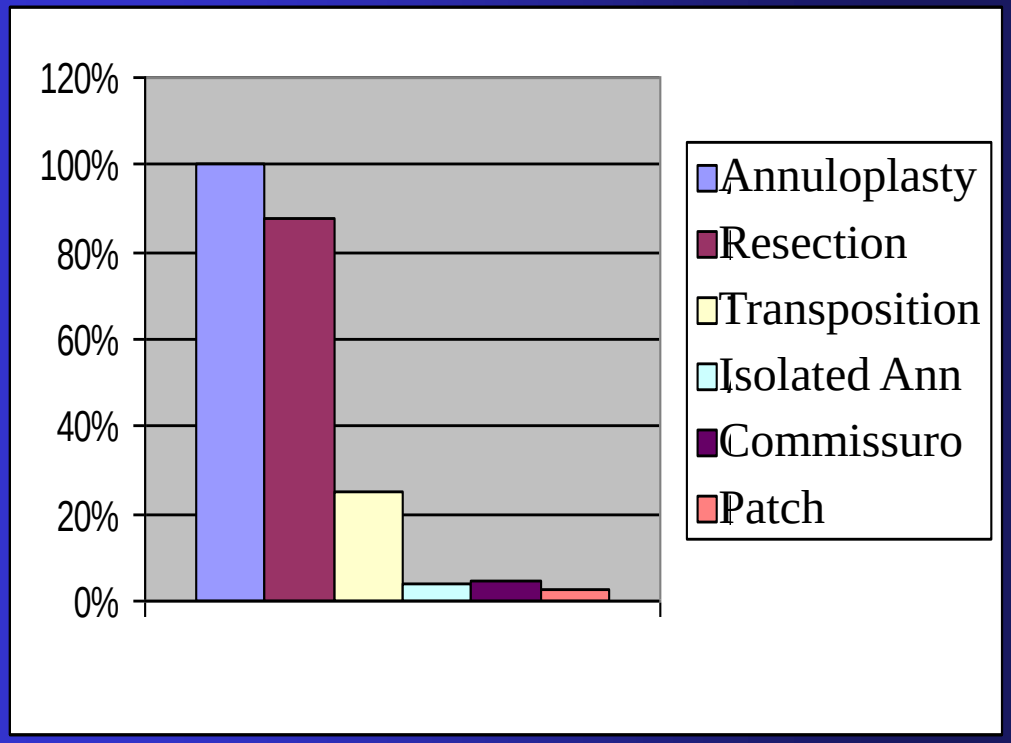
MI Aetiology

	FSC	Euro Heart Survey[1]
Degenerative	69 %	61.3 %
Rheumatic	10 %	14.2 %
Ischaemic	11 %	7.3 %
Endocarditis	5 %	3.5 %
Others	5 %	13.7 %

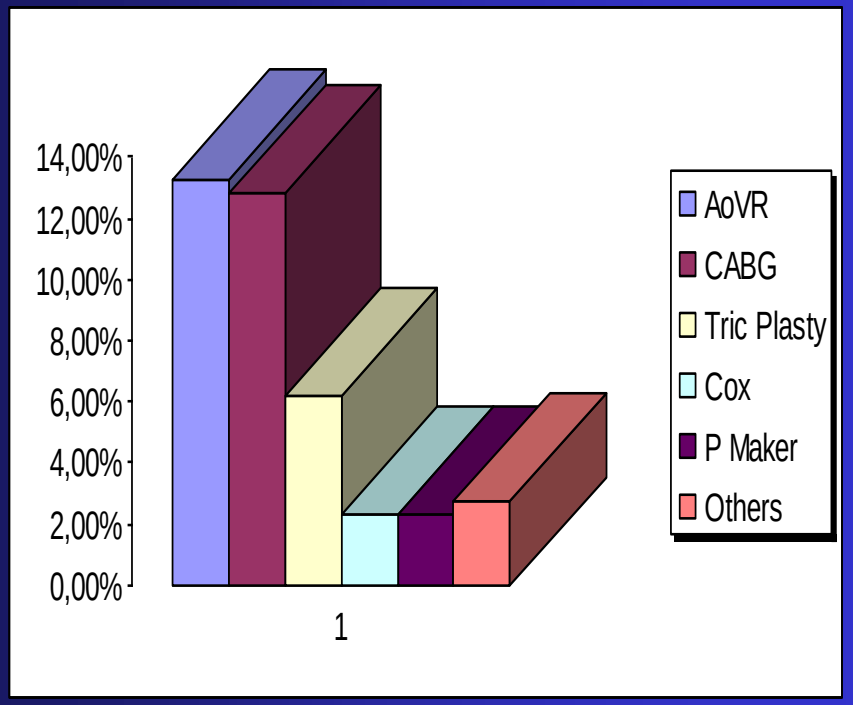
(1)Iung et al. The Euro Heart Survey on valvular heart Disease **Eur Heart J 2003**;24 : 1231-43

Type of operation

Mitral valve repair



Associated Surgery



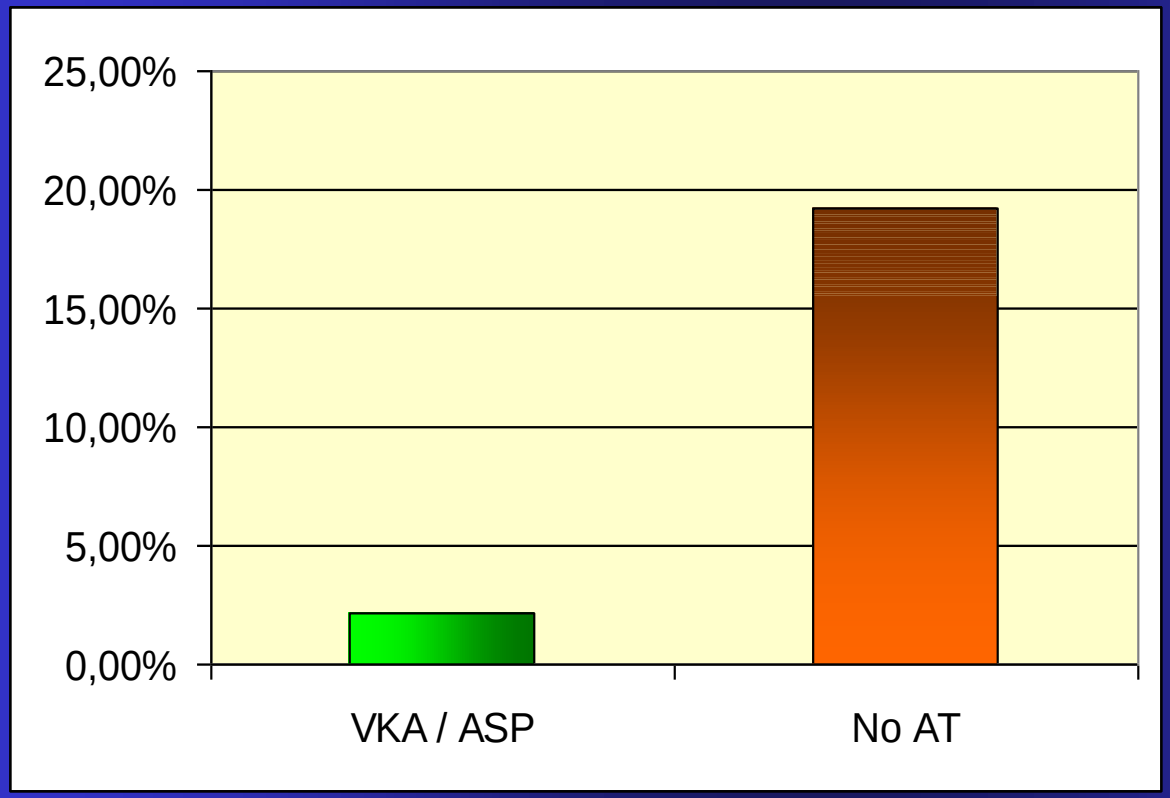
Clinical Events

10 Transient Ischaemic neurologic Attacks (TIA) 24.2 J (4-52) after MVR

- Predisposing causes ?
  - Age
  - Sex
  - Size LA or LV
  - AF
  - Associated surgery
  - Mitral leaflet involved
  - Carpentier's classification

Absence of relation to the occurrence of a TIA

TIA and Antithrombotics



169 pts : VKA alone

15 : VKA + Aspirin

39 : Aspirin alone

28 : No AT

5 of the 28 patients receiving no antithrombotic had a TIA : 18 %

5 of the 233 pts receiving VKA and/or aspirin had a TIA : 2%

OR = 9.0
P<0.0001

The real question : is an Antithrombotic therapy necessary after MV repair,

even in patients in whom choice of ATis not influenced by a concomitant pathology ?

Population were the choice of AT is real

- After excluding patients in whom AT indication was modified by a concomitant pathology
  - Concomitant surgery
    - AoVR, CABG …
  - Pre or post operative AF

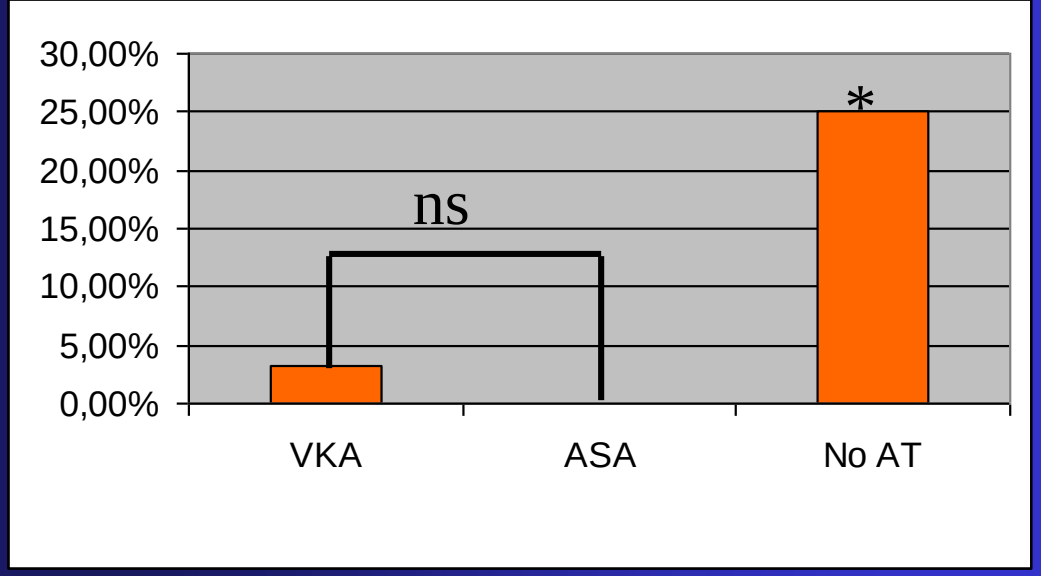
Population available for the study n= 143

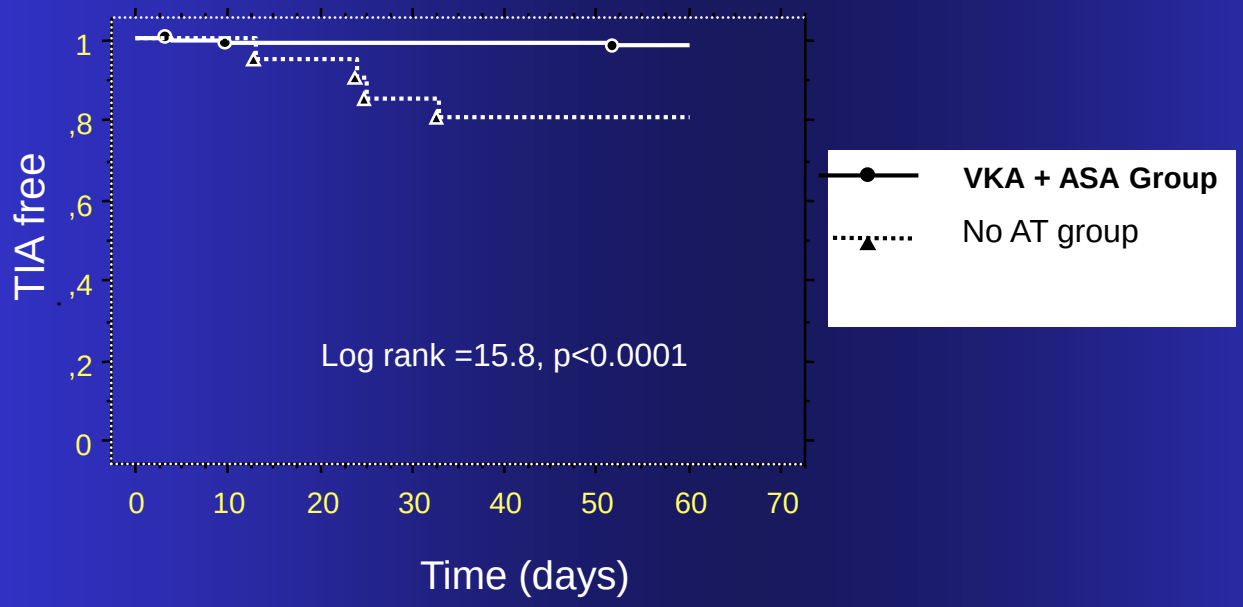
7 TIA among 143 patients :

VKA group : 3/91

ASA group :0/36

No AT group : 4/16





Conclusion

- An Antithrombotic Therapy is necessary at least during the first 6 post operative weeks after MV repair even in patients in sinus rythm and without concomitant pathology

•There seems to be no advantages
in performing early anticoagulation therapy
compared with antiplatelet regimen ?