



TURIN, 20TH—21ST NOVEMBER 2008

GREAT INNOVATIONS IN CARDIOLOGY

4TH JOINT MEETING WITH MAYO CLINIC

4TH TURIN CARDIOVASCULAR NURSING CONVENTION



ABSTRACT SESSION (PART II)

Chairmen

D. Casalucci (Torino), M. Dalmaso (Ivrea—TO)

Early experience of percutaneous interventional treatment for atrial septal defects: a safety and efficacy evaluation.

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P. Lombardi, E. Meliga, **G. Amato**, G. Butera,
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Aim

Mid-long term evaluation of:

Safety and efficacy of
percutaneous treatment
for atrial septal defects
(patent foramen ovale and
atrial septal defect ostium
secundum)

Methods

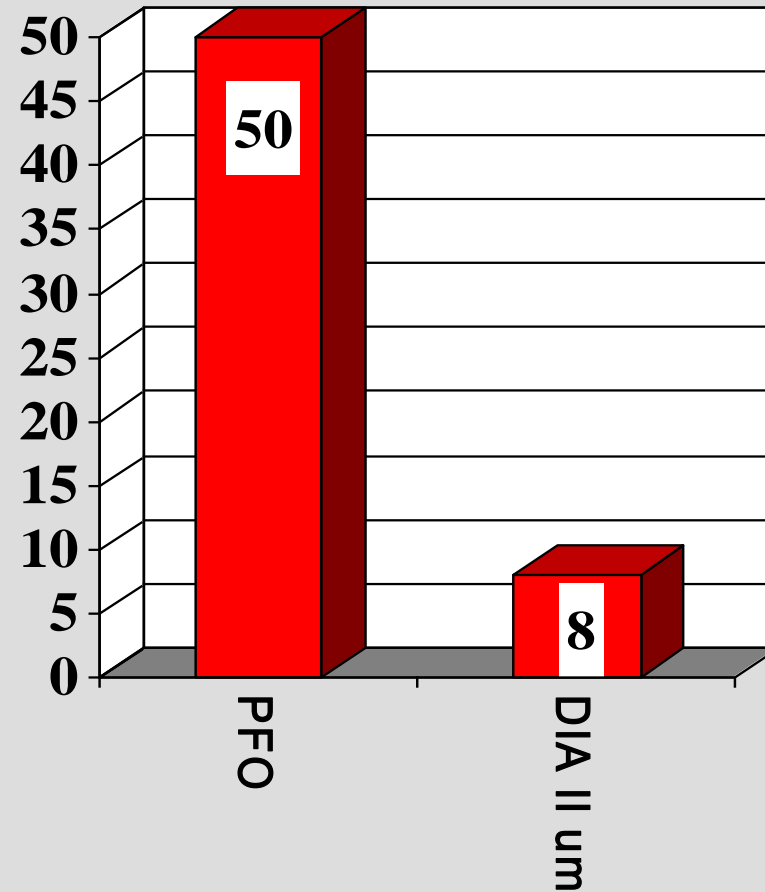
Prospective registry
with instrumental evaluation
at 6 months
and mid-long term
clinical outcomes analysis
in 58 patients treated
in overall 36 months

Patients characteristics

Age
52 ±15

F/M 52%

Diabetes 16%



Patent foramen ovale (50 patients)

Lesions at neuroimaging

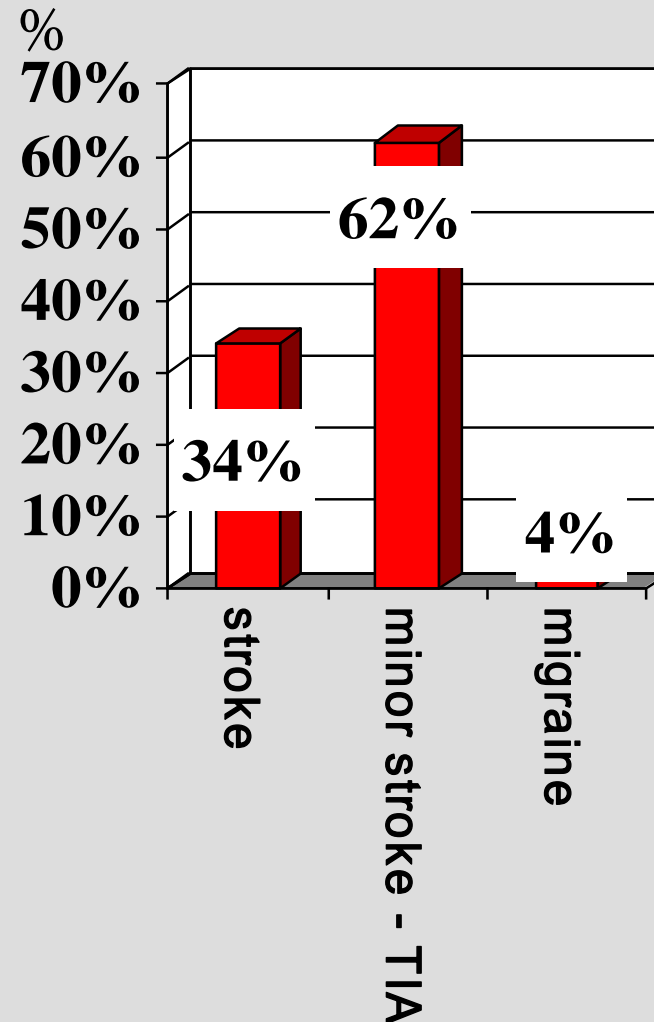
90%

Carotid and vertebral
doppler: Negative

Coagulation disorders

10%

**ATRIAL SEPTAL
ANEURYSM
73%**



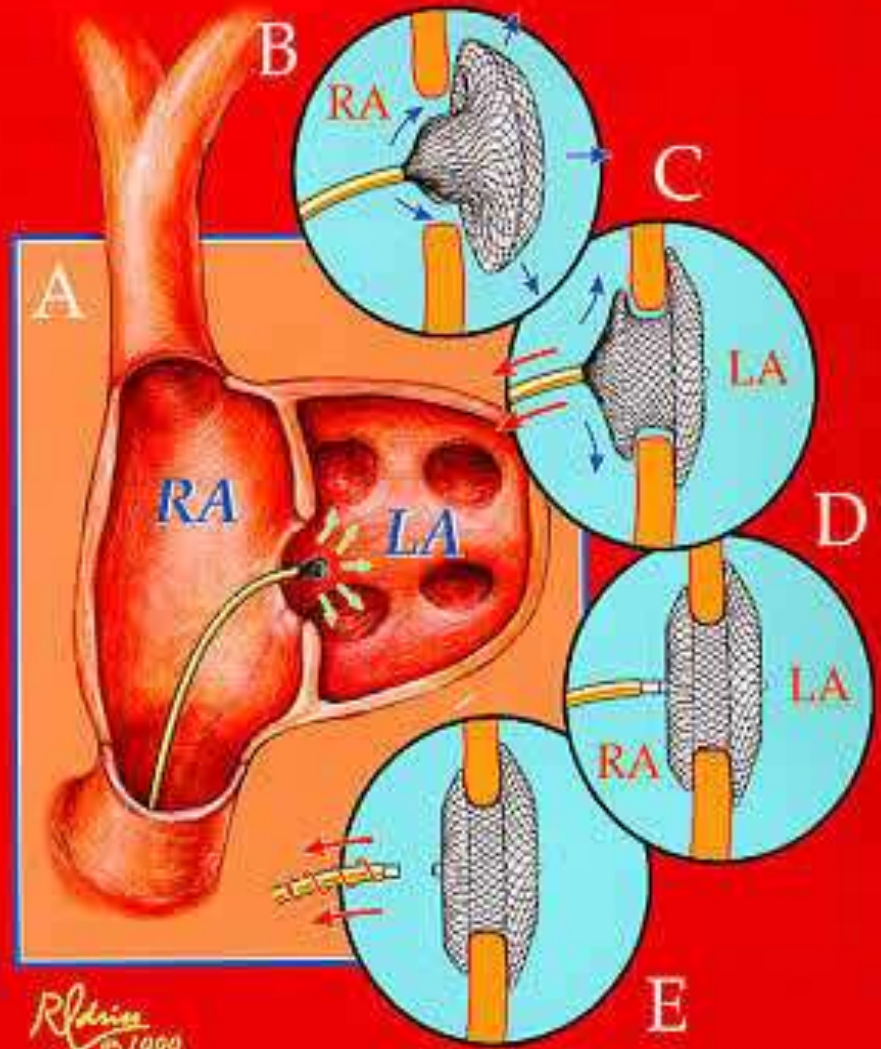
RIGHT INTERNAL
JUGULAR VEIN

SUPERIOR
VENA CAVA

INFERIOR
VENA CAVA

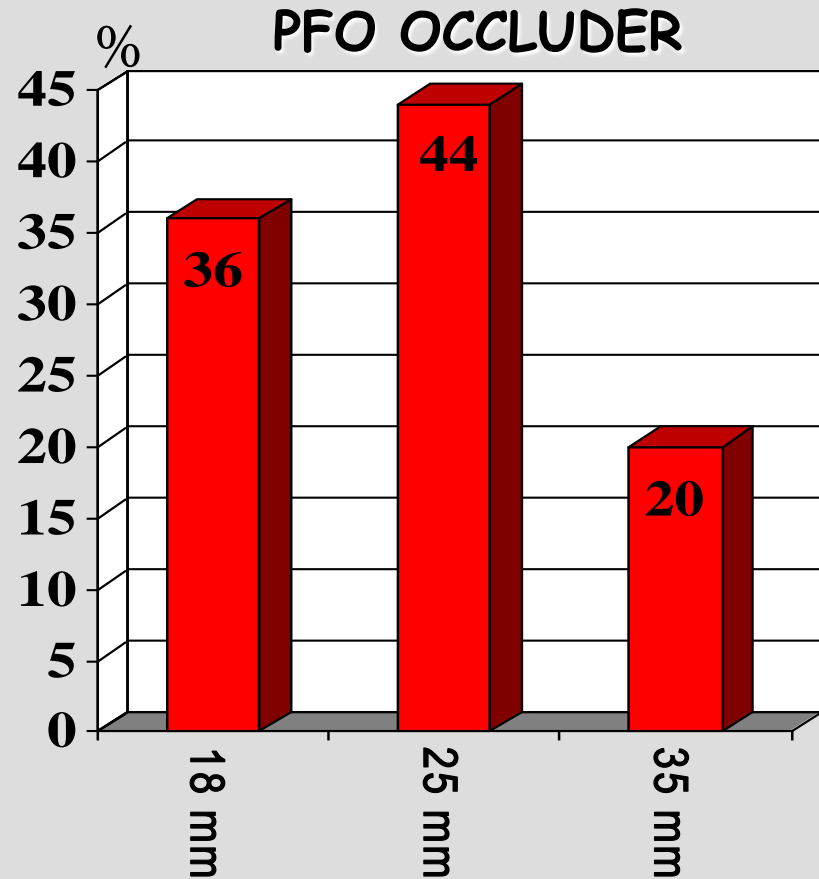
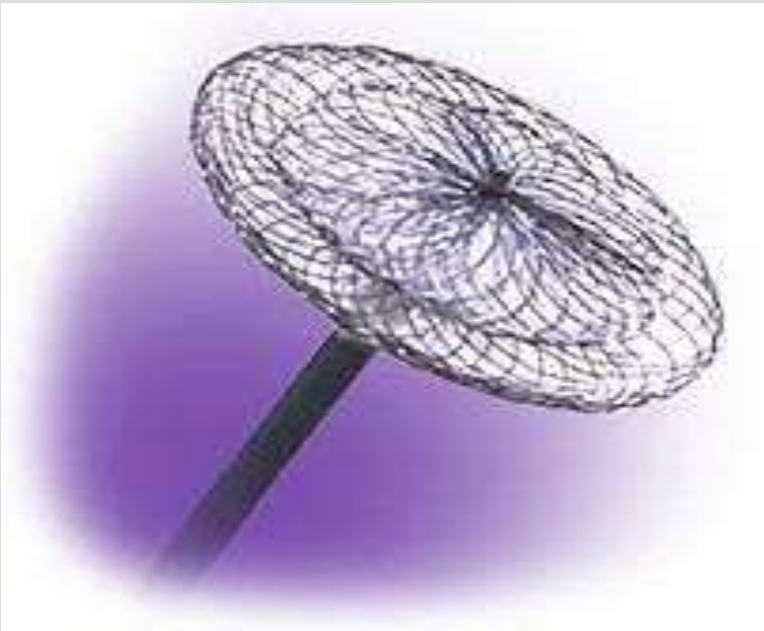
RIGHT FEMORAL
VEIN

John T. Millman '00



DEVICES

AMPLATZER
PFO and CardioSeal
Septal occluder



Procedural characteristics

Fluoroscopic guide and
trans-esophageal echocardiography

General Anaesthesia (15%)

Deep sedation (85%)

Antithrombotic prophylaxis :
ASA and clopidogrel for 3 months,
then ASA alone for 3 months.
Endocarditis prophylaxis: 12 months

Follow up: clinical visits and
TTE: 1th, 6th, 12th month
TEE and trans-cranial doppler: 6th month

Procedural results



Procedural success 100%

Major complications 0%

Minor complications 8%
(atrial arrhythmias)

Mean procedural time
 46 ± 11 min (range 20-90)

Mean fluoroscopic time
 $6,3 \pm 4$ min (range 2,2-
22,5)

Mean in-hospital stay
 $3,4 \pm 1,1$ days

Long-term follow-up results

Cerebral ischaemic recurrences	0%
Bleeding	0%
Endocarditis	0%
Thrombosis	0%
Displacement	0%
Aortic erosion	0%
Atrial septum erosion (mild residual left to right shunt)	2%
Severe residual shunt	0%
Mild residual shunt (during Valsalva)	18%

Follow up mean time 18 months (range 1-37 months)

Conclusions

Percutaneous treatment of atrial septal defects is effective and safe in a mid-long term follow-up and represents a valid option to medical and surgical therapy.

Ongoing randomized multicentric trials will definitely clarify the advantages of this therapeutic approach.

....THANK YOU