Percutaneous Balloon Mitral Valvuloplasty: 1990 Versus 2007. Is There any Difference between the "Old" versus "Nowadays"?

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Background: Since its introduction in 1984, percutaneous balloon mitral valvuloplasty (PBMV) became a class I indication for treating pts with symptomatic severe MS in the presence of favorable valve anatomy

Aim: Comparing pts characteristics, echocardiogarphic findings, technical issues and immediate outcome among candidates for PBMV in a time interval of almost 2 decades.

Material and Methods: Clinical files, echocardiographic data (Wilkins score), equipment use, hemodynamic evaluation and immediate outcome were investigated:

Results: Pts clinical characteristics:

	n	Mean age	Gender	FCII-III	AF	Repeated	Preg.	Additional
		(years)	(F/M)			PBMV		VHD
1990	17	35±6	17/0	6/11	2(12%)	0	2	6(35%)
2007	31	$45\pm\pm12$	24/7	27/4	9(36%)	2	0	14
p value		0.003	0.002	0.004	0.4%			0.05

n- number, AF- atrial fibrillation, Preg-pregnancy

Echocardiography, equipment use, and hemodynamic data:

	Wilkin's	Balloon	TF	MVA b	MVA a	M Gr b	M Gr a	MR
	Score	System		(cm^2)	(cm^2)	(mmHg)	(mmHg)	>2/4
1990	8±2	OTW	0	1±0.2	1.6±0.3	17±6	8±3	0
2007	9±2	Inoue	2/31	1.2 ± 01	1.6 ± 0.3	12±3	7±3	2/29
_p-value	ns			ns	ns	ns	ns	

TF-technical failure, b/a-before/after, M Gr- mean gradient OTW- over the wire.

Optimal result; $MVA \ge 1.5 \text{ cm}^2$ was achieved in 12/17 (71%) pts in 1990 and in 25/29 (86%) pts in 2007 (P-0.004). Urgent surgery (OMV +AVR) was needed in one pts during 2007.No death reported during two periods.

Conclusions: Nowadays less symptomatic older women are treated by PBMV in our institute. The higher immediate success rate in 2007 compared to 1990 most probably related to increased operator experience.