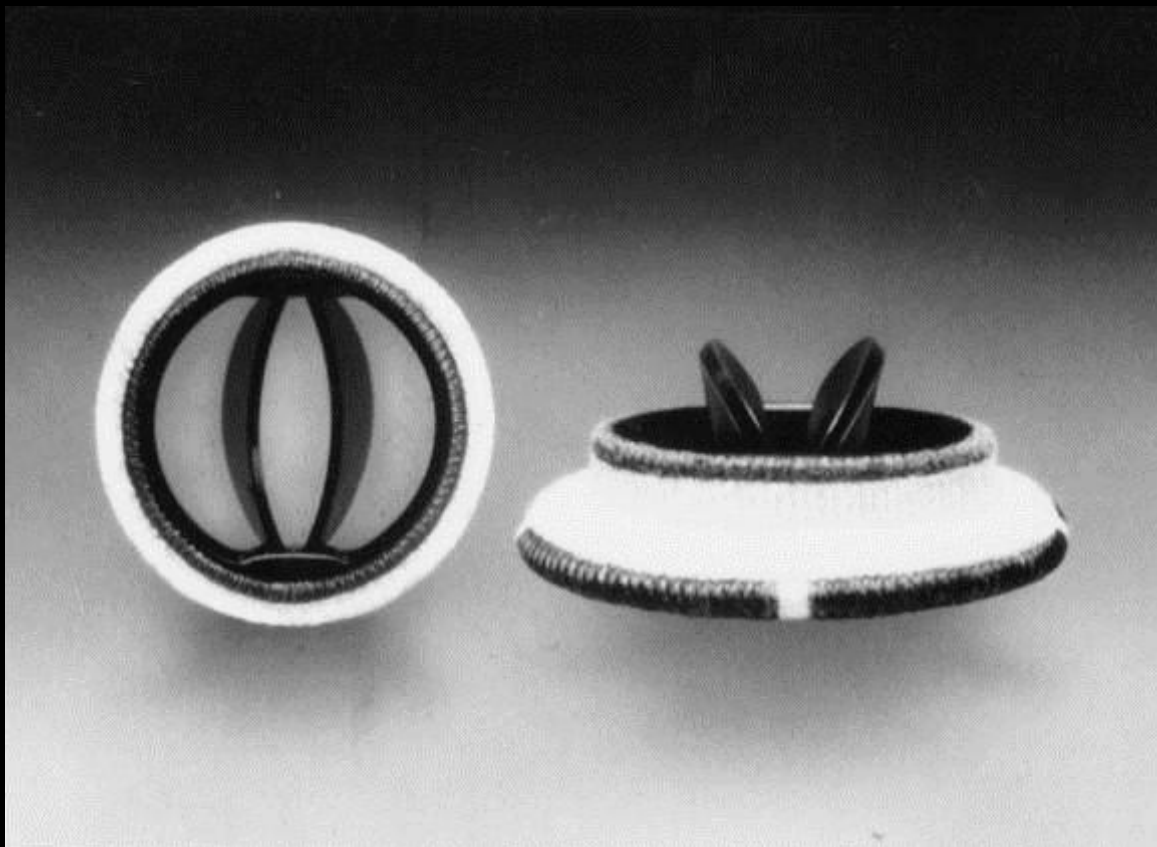
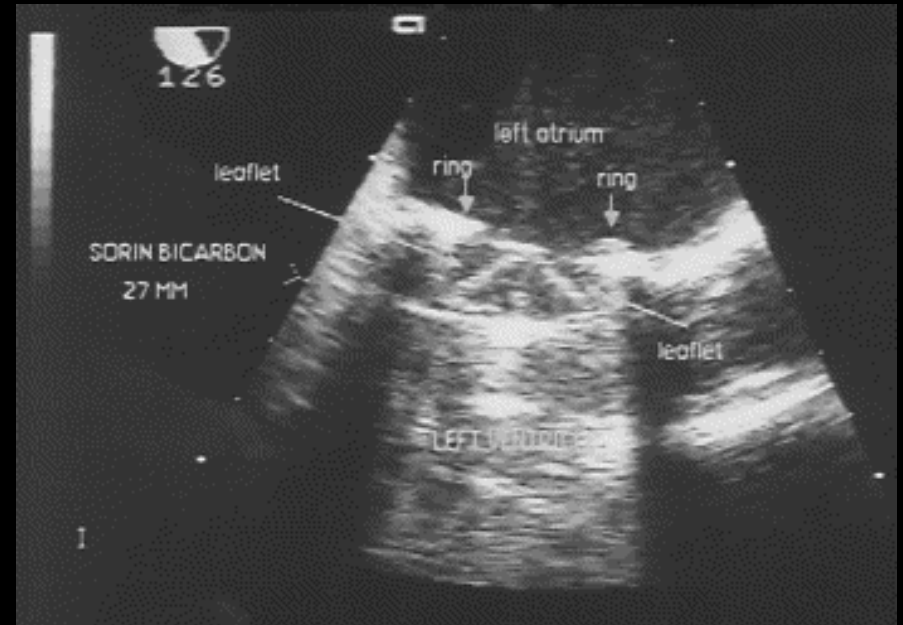
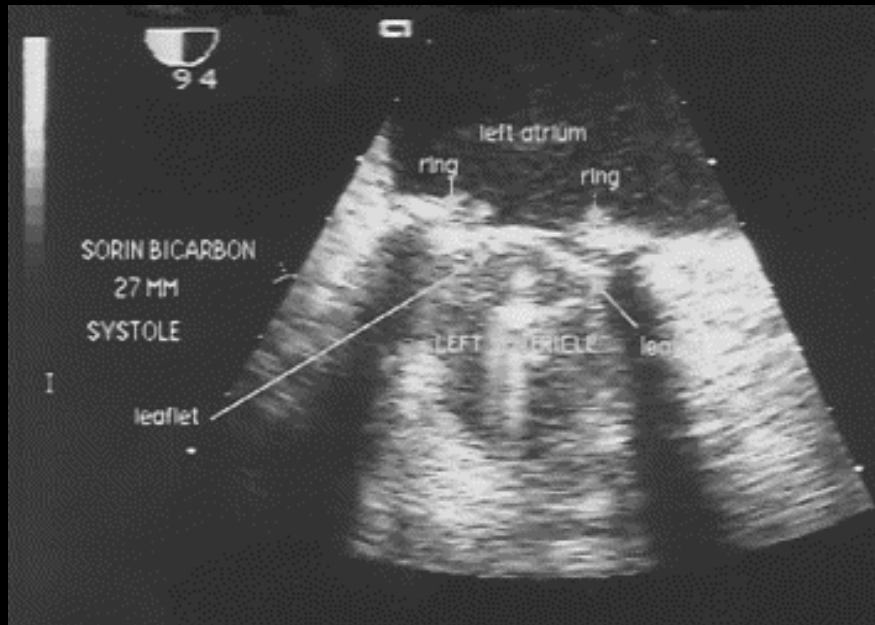


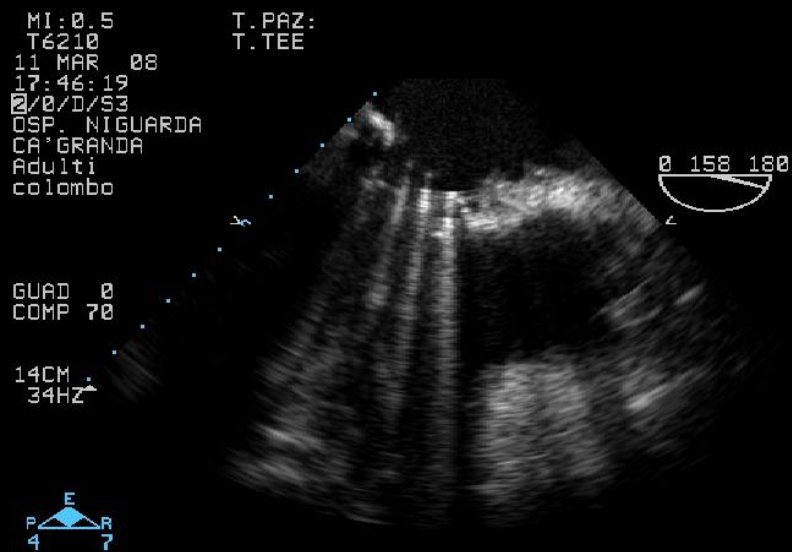
SORIN bileaflet



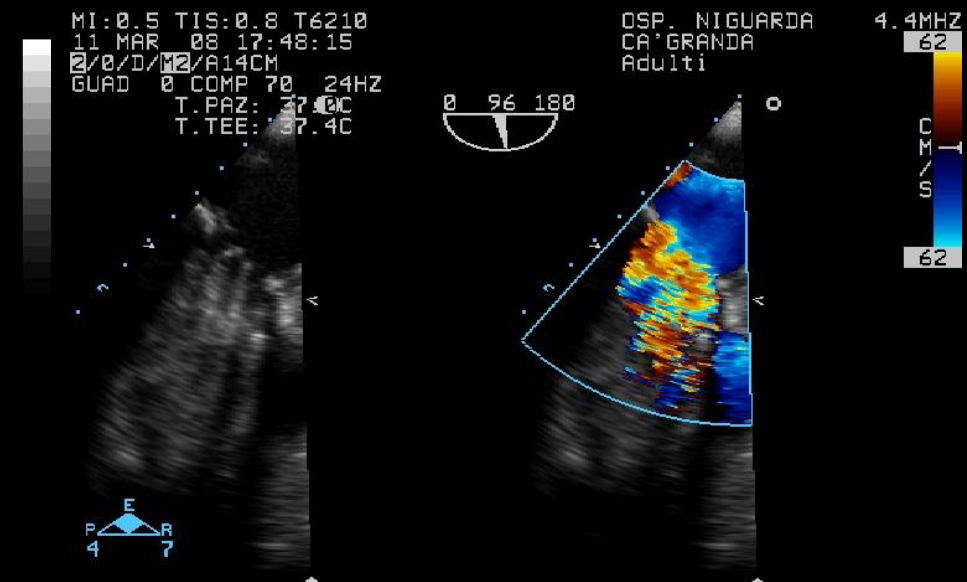
Sorin bicarbon 27



Sorin bicarbon 27



PHILIPS



PHILIPS

3

Sorin 31

TIS: 0.8 T6210
18 APR 08 11:24:14
2/0/E/12/A16CM
GUAD 50 COMP 65 13HZ
T.PAZ: 37.0C
T.TEE: 37.4C

DSP. NIGUARDA
CA' GRANDA
TEE LAB

4.4MHZ

62

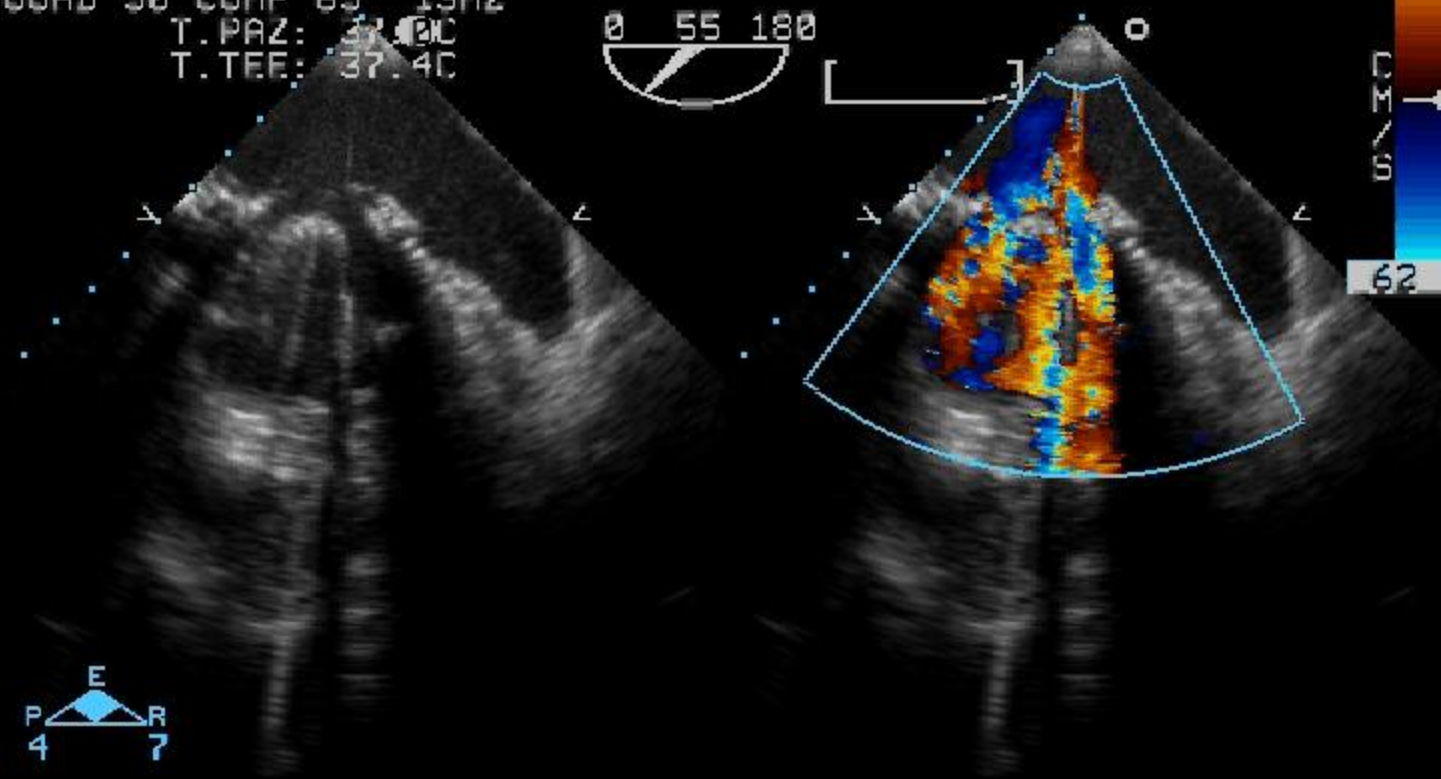
CM
S

62

0 55 180

E
P R
4 7

PHILIPS



Sorin 31 PW Doppler

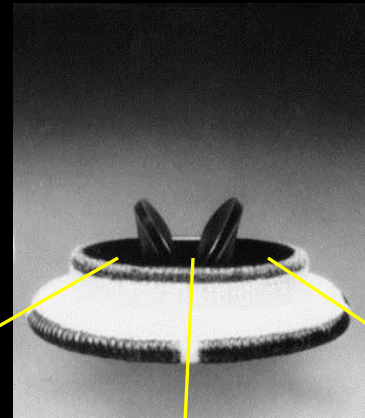
TIS:0.5
T6210
OSP. NIGUARDA
CA' GRANDA
TEE LAB
SORIN 31

GUAD 5
2/0/E/53

18 APR 08
11:21:32

0 55 180
4.4MHz

T.PAZ: 37.0C
T.TEE: 37.1C



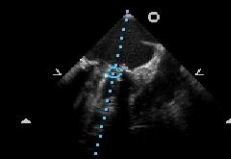
TIS:0.7
T6210
OSP. NIGUARDA
CA' GRANDA
TEE LAB
SORIN 31

GUAD 5
2/0/E/53

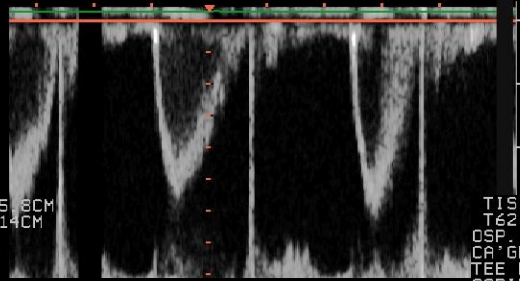
18 APR 08
11:18:26

0 58 180
4.4MHz

T.PAZ: 37.0C
T.TEE: 37.4C



CAMP: 5.8CM
LUNG: 0.14CM
e: 0
▽= 20



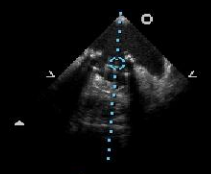
TIS:0.5
T6210
OSP. NIGUARDA
CA' GRANDA
TEE LAB
SORIN 31

GUAD 5
2/0/E/53

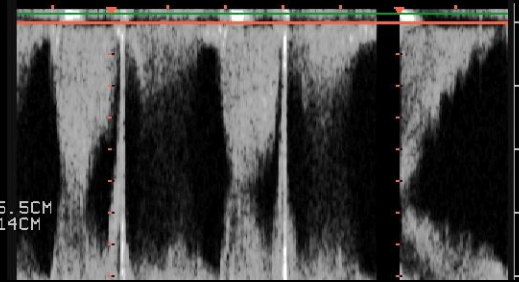
18 APR 08
11:21:45

0 55 180
4.4MHz

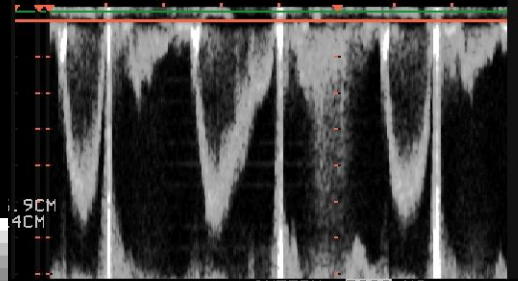
T.PAZ: 37.0C
T.TEE: 37.0C

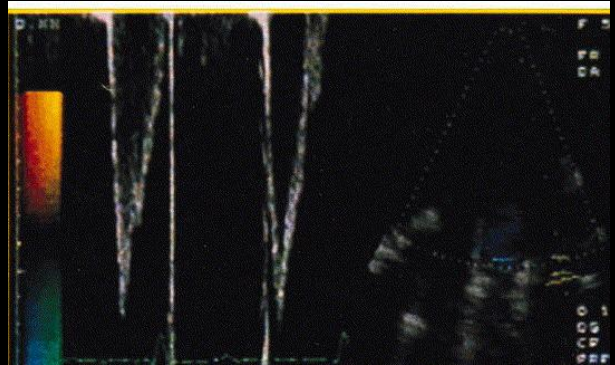
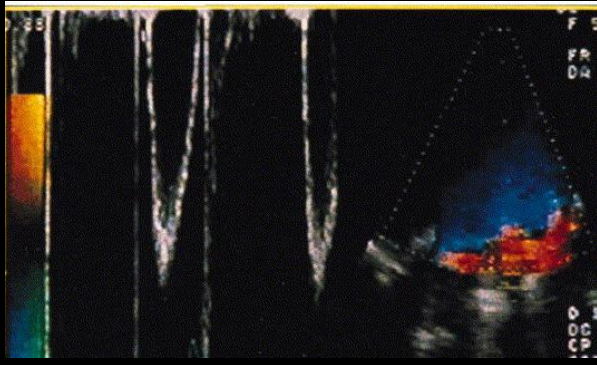
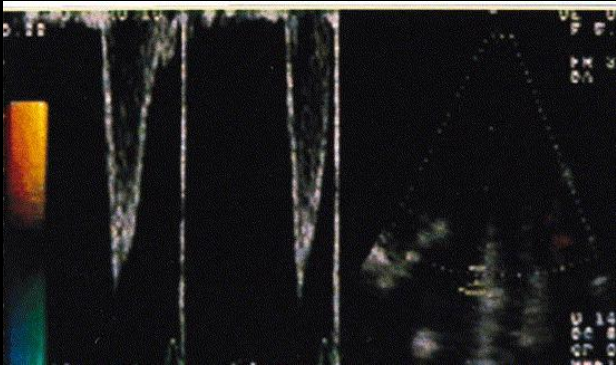
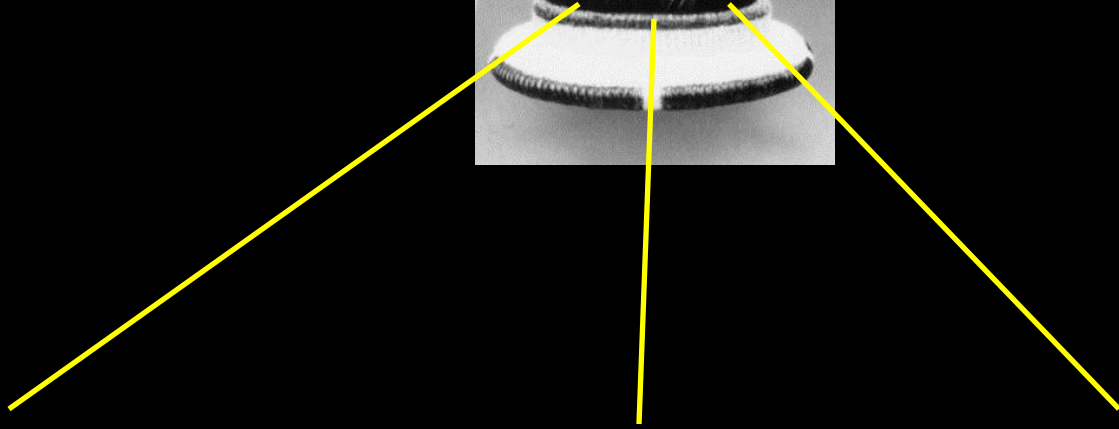
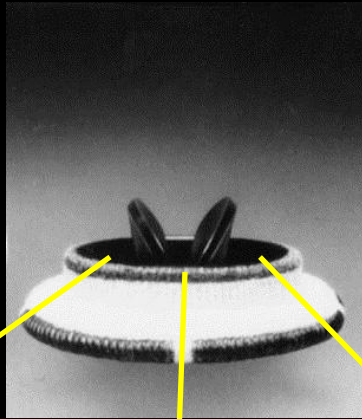


CAMP: 5.5CM
LUNG: 0.14CM
e: 0
▽= 20



INTERV. 3000 MS





Badano et al. J Am Soc echocardiogr 1997;10:632-643

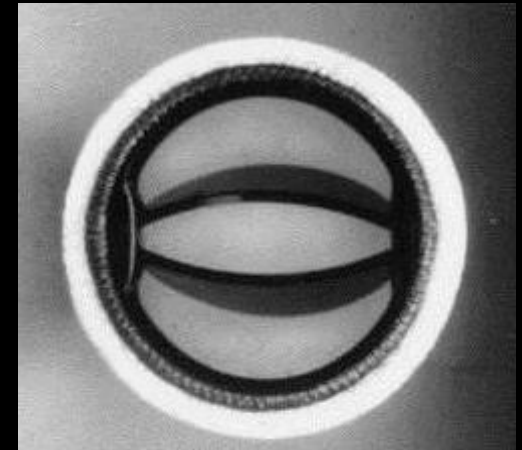
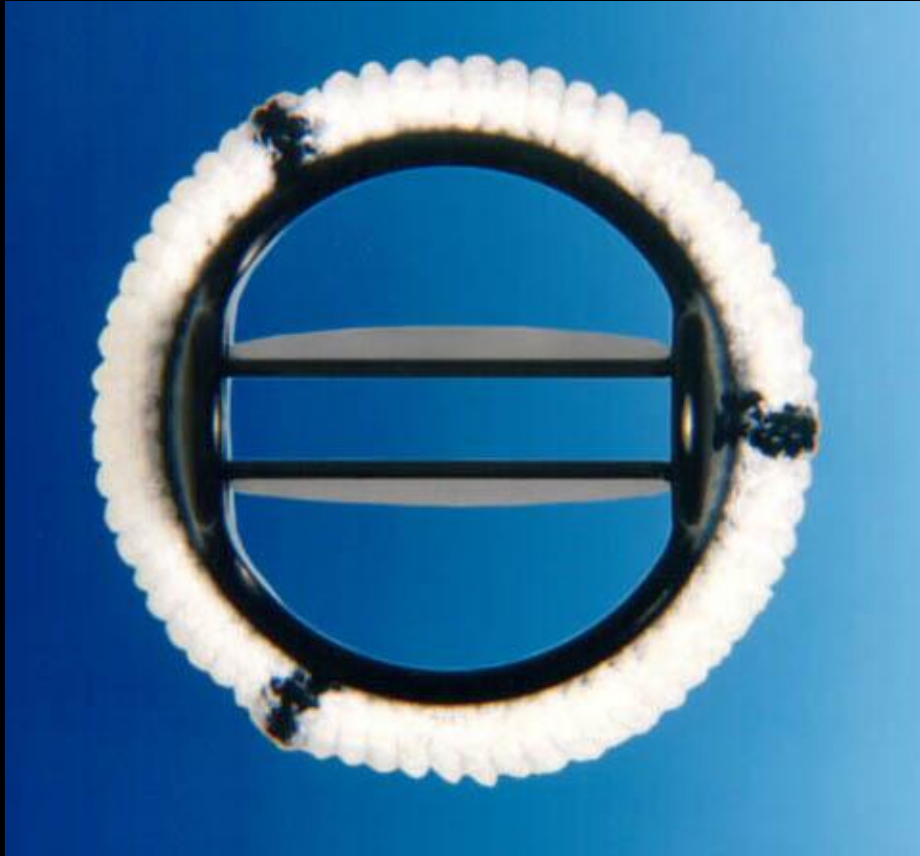
Parametri Doppler Sorin bileaflet mitralica

Table 1 Valve specifications and Doppler data in 68 normal Sorin Bicarbon valves in the mitral position

Valve size (mm)	No. of valves	Heart rate (beats · min ⁻¹)	Flow (ml · sec ⁻¹)	AOA (cm ²)	PHT (ms)	Peak velocity (m · sec ⁻¹)	Peak gradient (mm Hg)	Mean gradient (mm Hg)
25	3	71	129	3.45	70 (68-72)	1.95 (1.92-1.97)	15 (15-16)	4 (3-5)
27	25	80 (58-90)	88 (61-118)	4.14	82 (57-137)	1.65 (1.12-1.97)	11 (5-16)	4 (3-5)
29	30	85 (64-98)	110 (64-156)	5	80 (51-107)	1.73 (1.27-2.14)	12 (6-18)	4 (2-7)
31	9	88 (71-119)	129 (85-170)	5	83 (50-105)	1.66 (1.41-1.87)	10 (8-14)	4 (3-7)

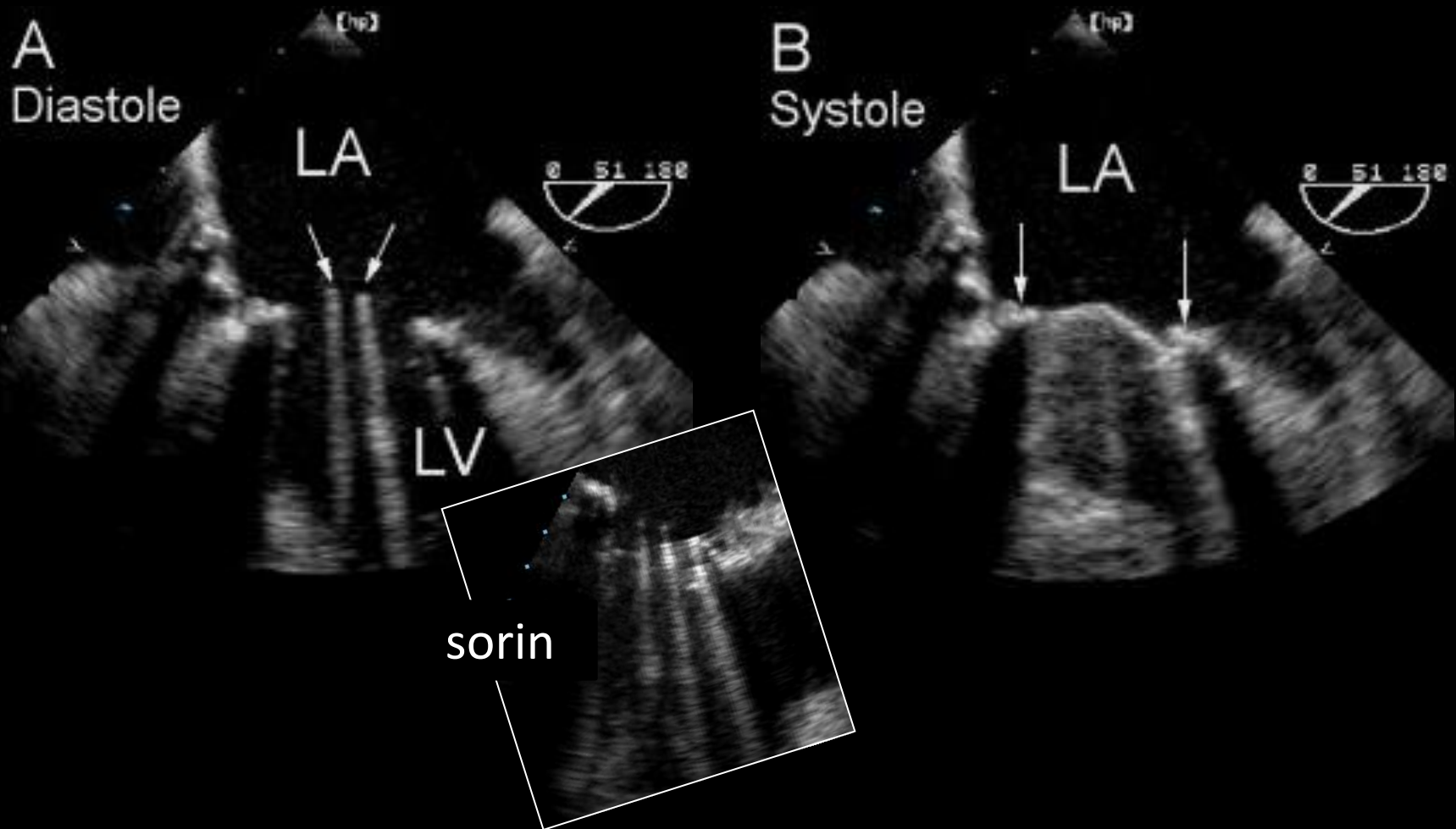
Badano et al. J Am Soc echocardiogr 1997;10:632-643

St. JUDE

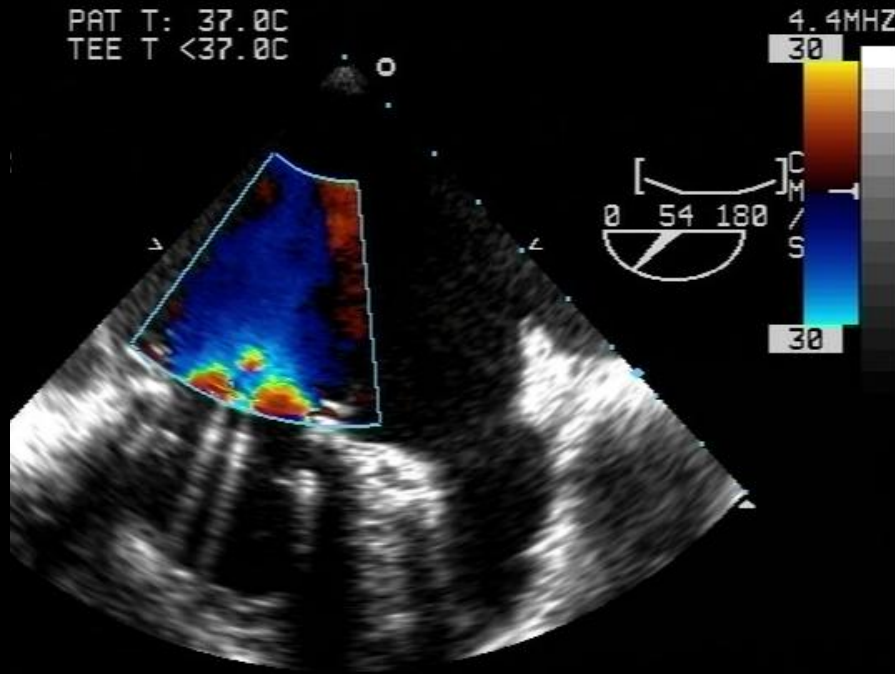


Sorin

St. JUDE

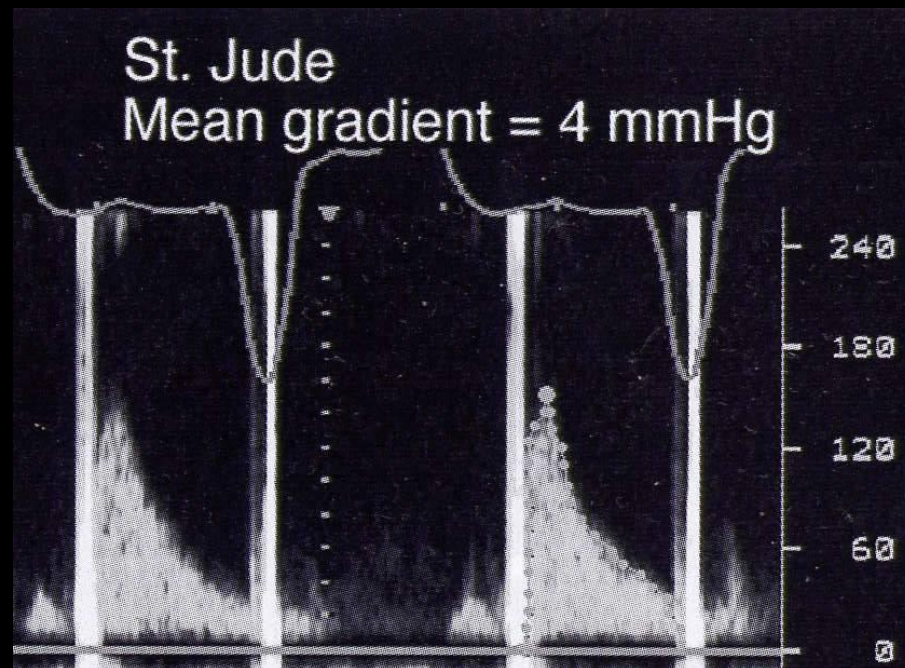
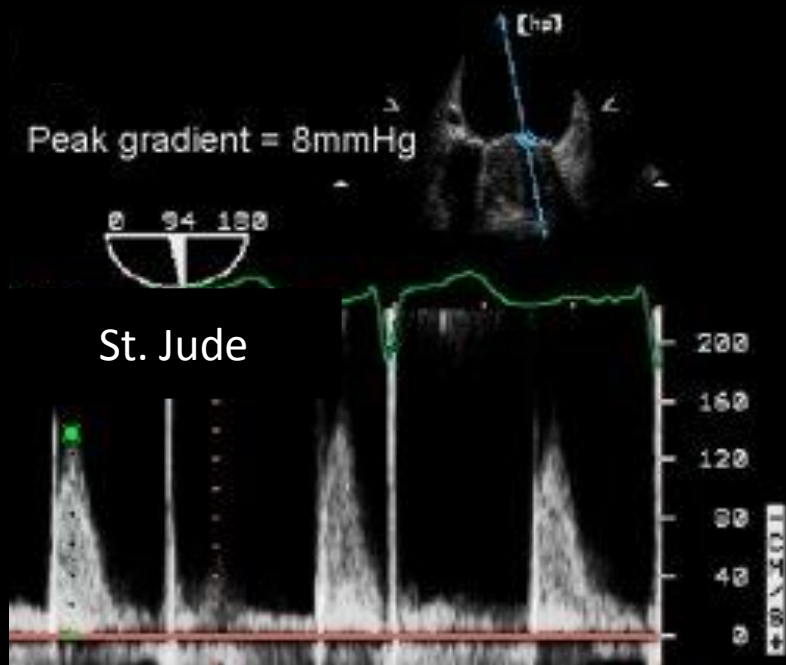


St. Jude



Flow velocity is highest through the central orifice, and if this flow is sampled with continuous wave Doppler imaging, an overestimation of the true gradient occurs.

St. Jude

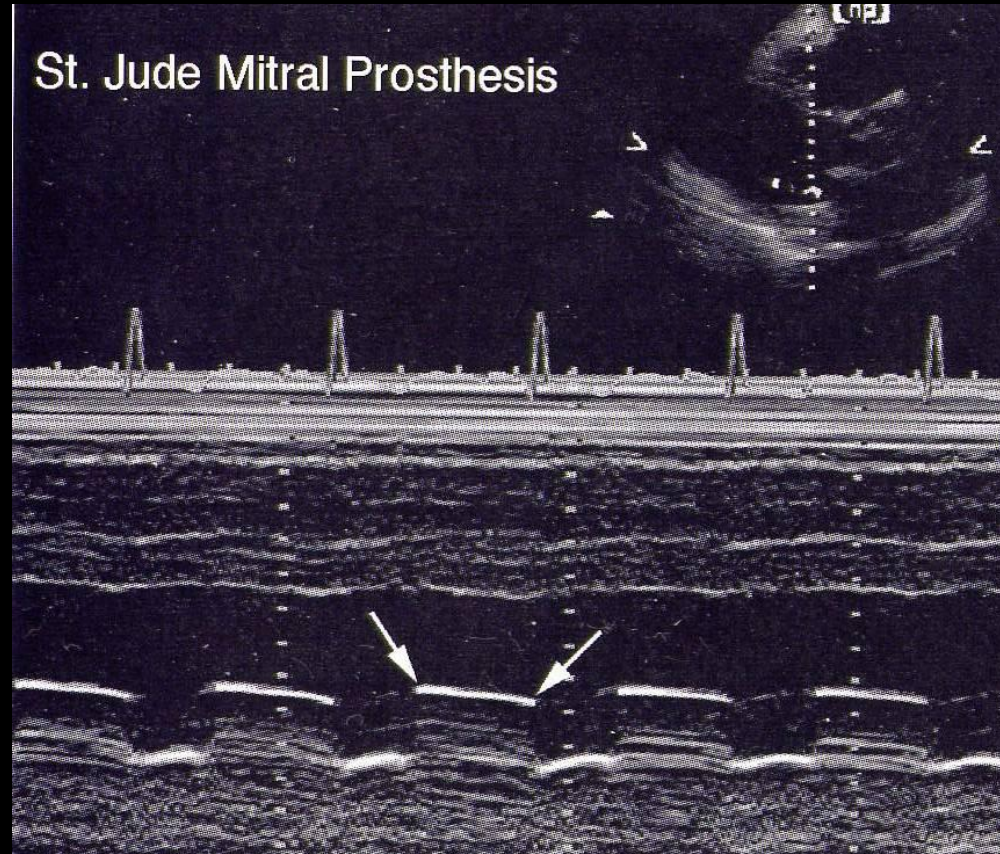


Size	Mean gradient	Peak velocity
25	3 +-1 mmHg	75 +- 4 m/s
27	5 +-2	75 +-10
29	4 +- 2	85 +- 10
31	4 +- 2	74 +- 13

there is a discrepancy between the calculated echocardiographic gradient across the valve and the catheter-measured gradient.

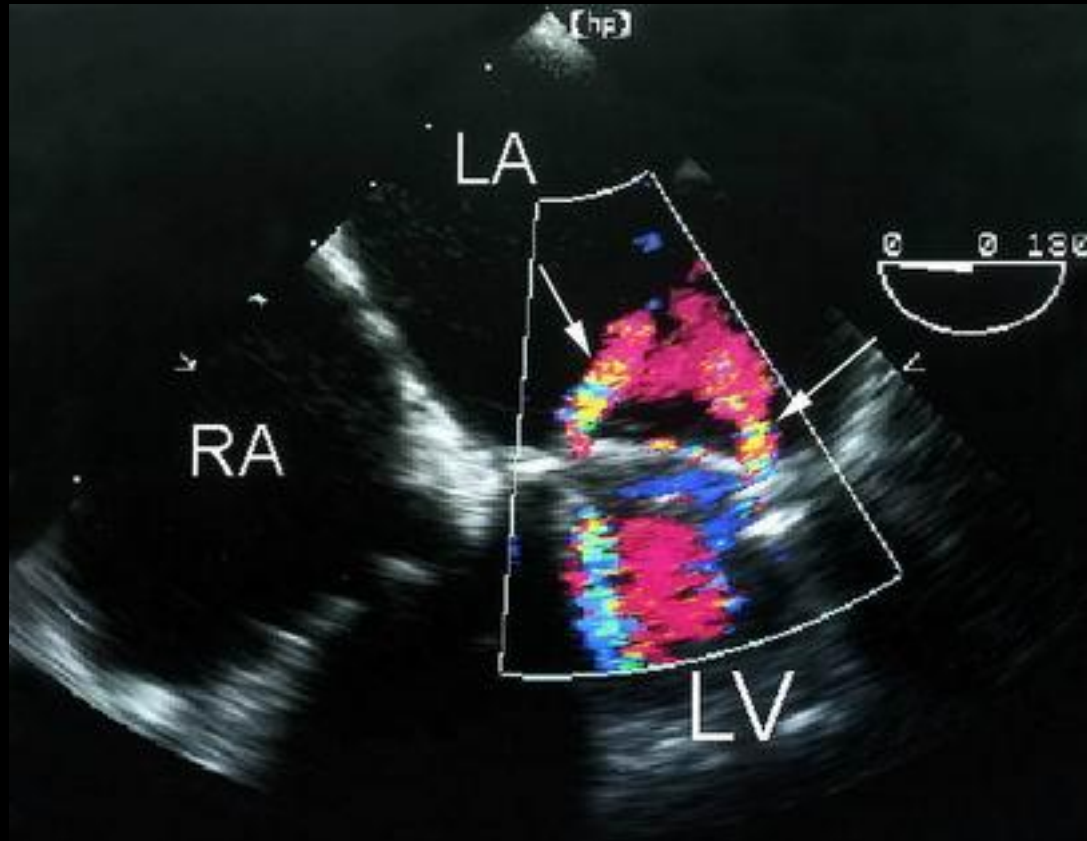
"Gradients across the St Jude valve measured by Doppler ultrasound are higher than transvalvular or net catheter gradients due to downstream pressure recovery. This is more marked for Doppler gradients based on centerline velocities than side orifice velocities and is more pronounced for valves in an aortic than a mitral configuration. Therefore, to be comparable with invasive transvalvular catheter gradients, either Doppler gradients should be calculated based on side orifice velocity measurements or the Doppler gradient calculation should include the pressure loss coefficient when based on central orifice velocities."

St. Jude



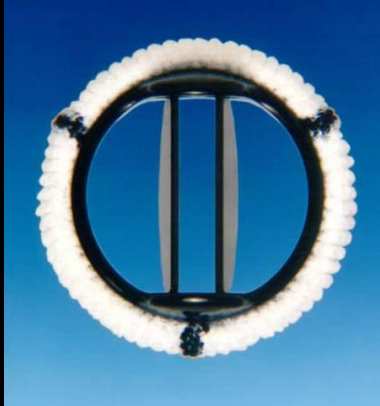
M-mode imaging can be useful to more precisely define the brisk opening and closing and the degree of excursion of the occluder.

St. Jude

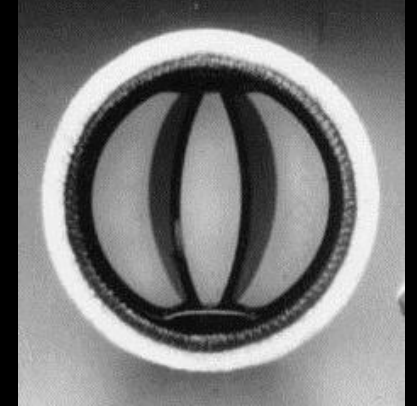


Le protesi bileaflet tendono ad avere da 2 a 3 jets intraprotésici

CARBOMEDICS

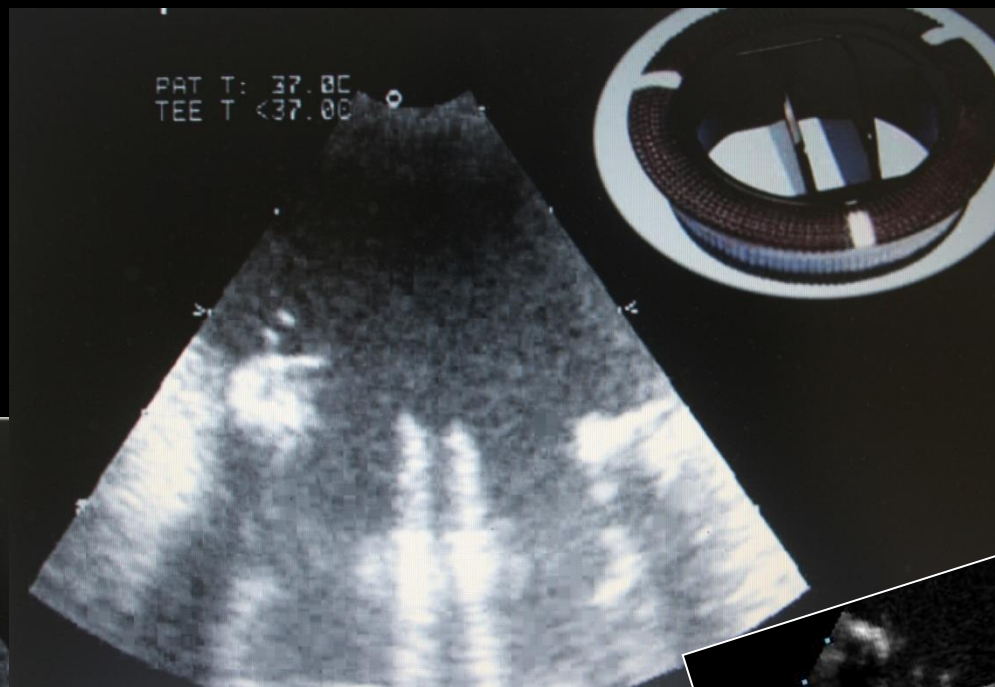


St.Jude

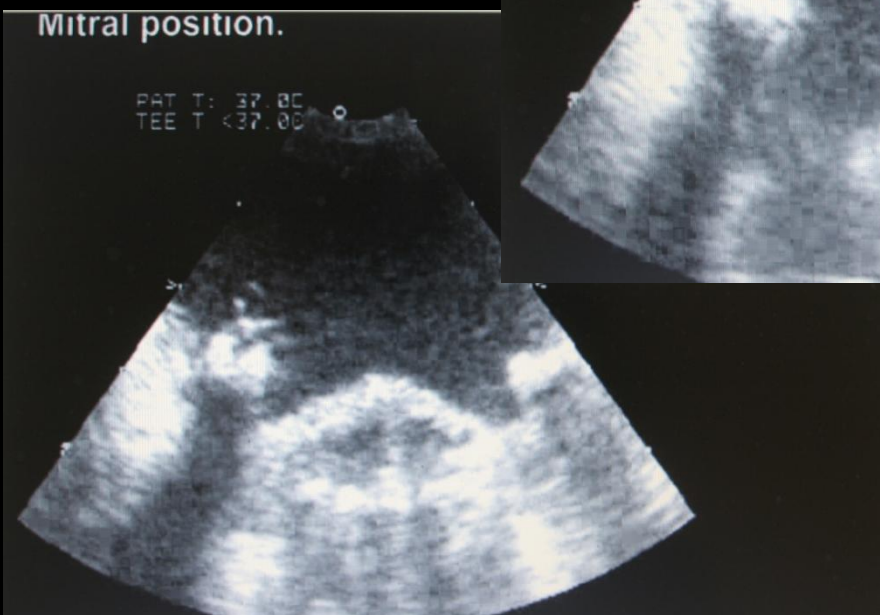


Sorin

carbomedics



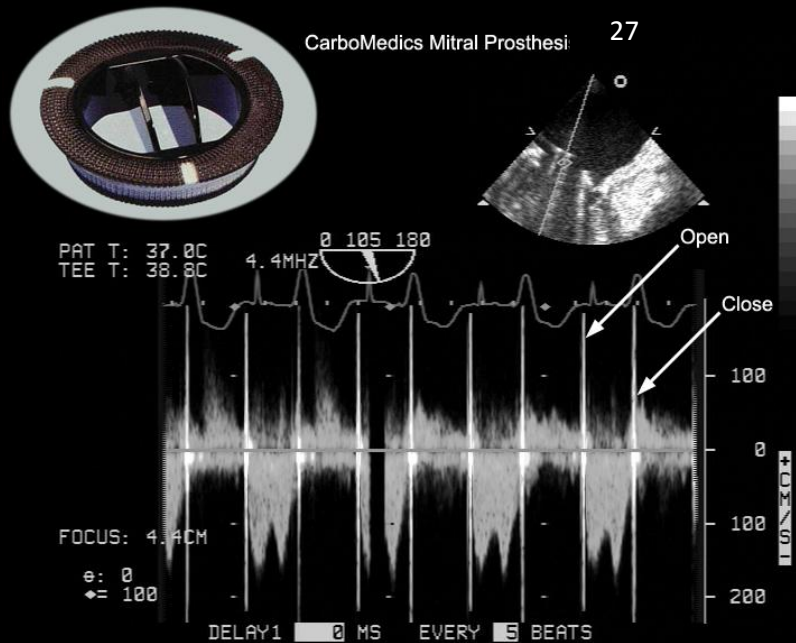
Mitral position.



sorin



CarboMedics mitral prosthesis



According to Rosenhek et al, the typical haemodynamic values for this valve in the mitral position are:

Peak Gradient (mm Hg): 8.78 ± 2.9
 Mean Gradient (mm Hg): 3.39 ± 0.97
 Pressure half-time (mSec): 88 ± 17
 Effective Orifice (cm²): 2.3 ± 0.4

Rosenhek R et al. J Am Soc Echocardiogr. 2003 Nov;16(11):1116-27.

Size	Max gradient	Mean graient	Peak velocity
25	10 +- 2	4 +- 1	93 +- 8
27	9 +- 3	3 +- 1	89 +- 20
29	9 +- 3	3 +- 1	88 +- 17
31	9 +- 2	3 +- 1	92 +- 24
33	9 +- 2	5 +- 3	93 +- 12

Sorin monodisco



Sorin monodisco

MI: 1.0
T6210
23 APR 88
15:44:20
8/8/0/53
OSP. NIGUARDA
CA' GRANDA
Adulti
SORIN

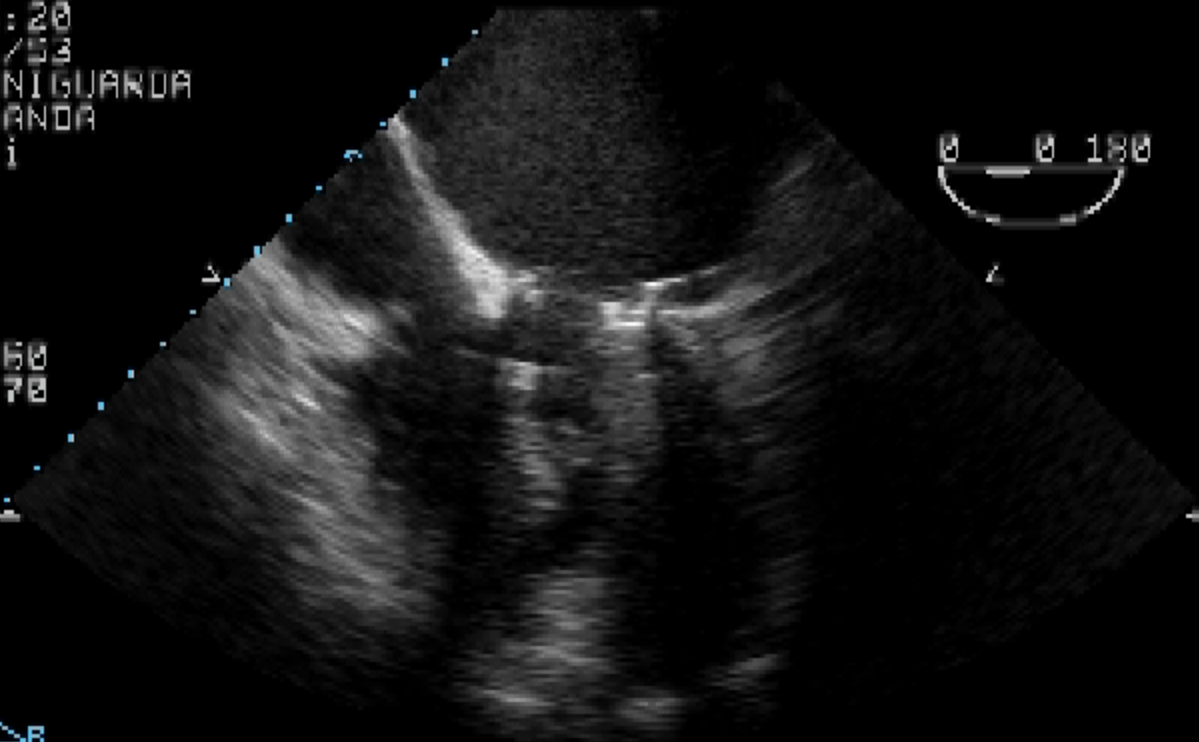
T.PAZ:
T.TEE:

GUAD 50
COMP 70

19CM
34HZ



PHILIPS



Sorin monodisco

MI: 1.0
T6210
23 APR 88
15:58:57
8/8/0/53
OSP. NIGUARDA
CA' GRANDA
Adulti
SORIN

T. PAZ:
T. TEE:

GUAD 50
COMP 70

19CM
34HZ



PHILIPS



Sorin monodisco

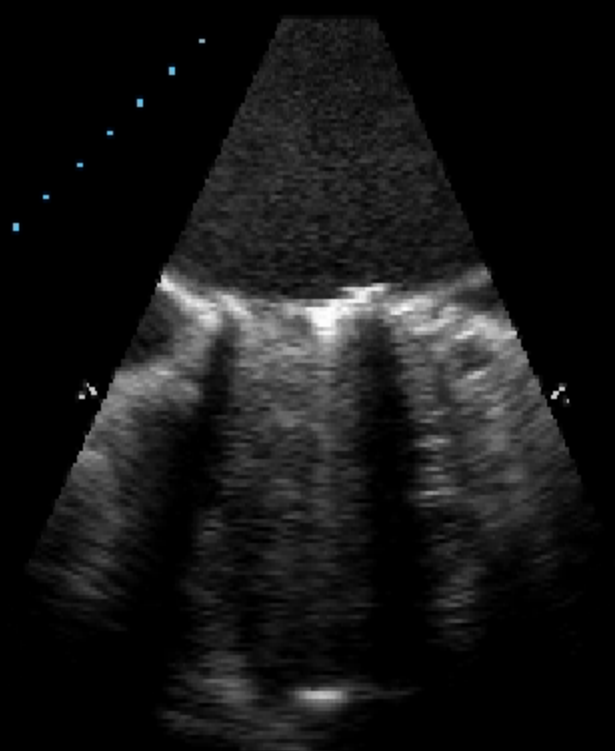
MI: 1.1
T6210
23 APR 88
15:58:47
8/8/0/53
OSP. NIGUARDA
CA' GRANDA
Adulti
SORIN

T. PAZ:
T. TEE:

GUAD 50
COMP 70

19CM
67HZ

E
P R
4 7



0 56 180

PHILIPS

Sorin monodisco

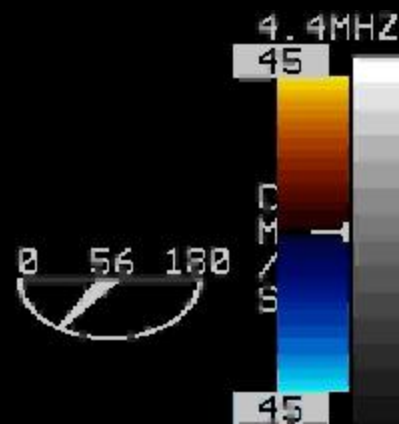
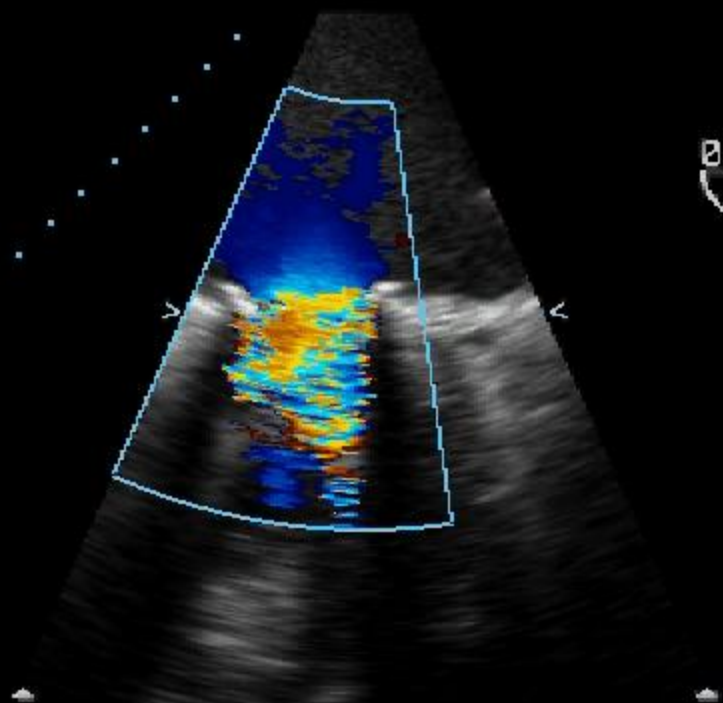
MI:0.5 TIS:0.8 T.PAZ:
T6210 T.TEE:
23 APR 08
15:51:04
2/0/D/12/A
OSP. NIGUARDA
CA' GRANDA
Adulti
sorin

GUAD 50
COMP 70

19CM
22HZ



PHILIPS



Sorin monodisco

MI:0.6 TIS:0.8 T6210
23 APR 88 15:59:18
0/0/0/0/A19CH
GUAD 50 COMP 70 15HZ
T.PAZ: 77.0C
T.TEE: 39.5C

OSP. NIGUARDA
CA' GRANDA
Adulti

4.4MHZ



Sorin monodisco

MI:0.5 TIS:0.8 T.PAZ:
T6210 T.TEE:
23 APR 08
15:46:00
2/0/D/12/A
OSP. NIGUARDA
CA'GRANDA
Adulti
sorin

GUAD 50
COMP 70

19CM
17HZ



PHILIPS



Le protesi monodisco hanno da uno a due jet

Sorin monodisco

MI:0.6 TIS:0.7
T6210
OSP. NIGUARDA
CA' GRANDA
Adulti
sorin

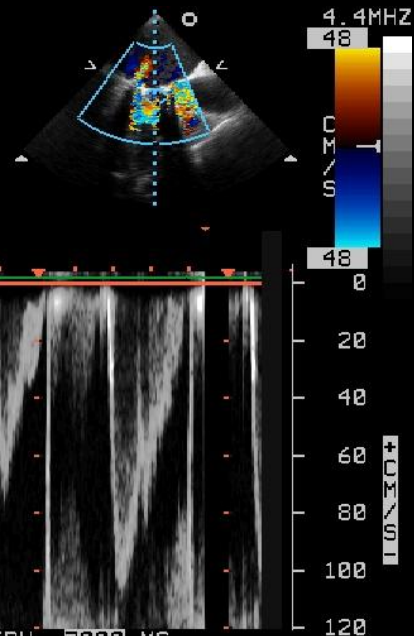
GUAD 5

2/0/0/02/H

23 APR 08
16:06:06

T.PAZ: 37.0C
T.TEE: 39.1C

0 139 180
4.4MHZ



CAMP: 8.4CM
LUNG: 0.14CM
e: 0
v= 20

INTERV. 3000 MS

MI:0.5 TIS:0.9
T6210
OSP. NIGUARDA
CA' GRANDA
Adulti
sorin

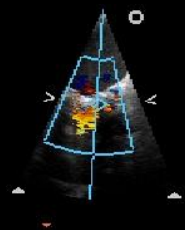
GUAD 5

2/0/0/02/H

23 APR 08
15:52:43

T.PAZ: 37.0C
T.TEE: 39.6C

0 167 180
4.4MHZ



4.4MHZ MI:0.6 TIS:0.7
T6210
OSP. NIGUARDA
CA' GRANDA
Adulti
sorin

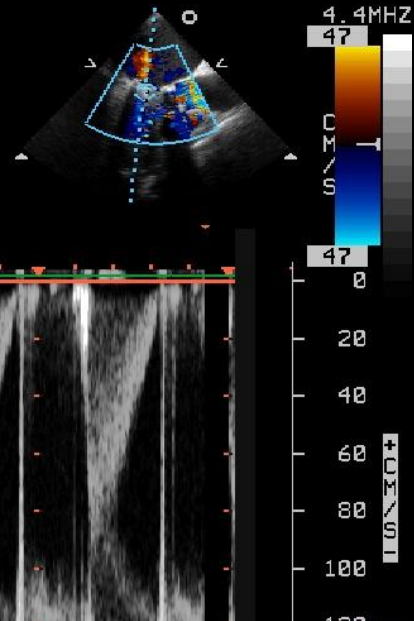
GUAD 5

2/0/0/02/H

23 APR 08
16:05:51

T.PAZ: 37.0C
T.TEE: 39.1C

0 139 180
4.4MHZ



CAMP: 8.3CM
LUNG: 0.14CM
e: 0
v= 20

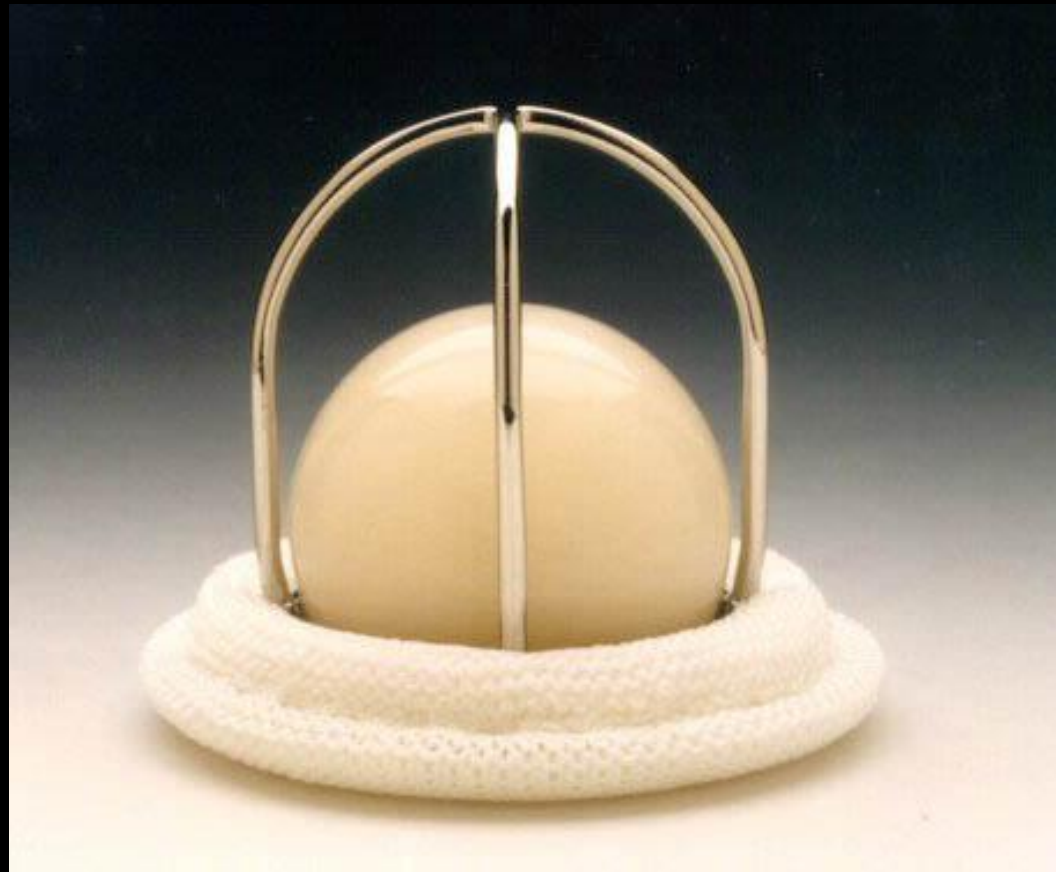
INTERV. 3000 MS

FUOCO: 9.4CM

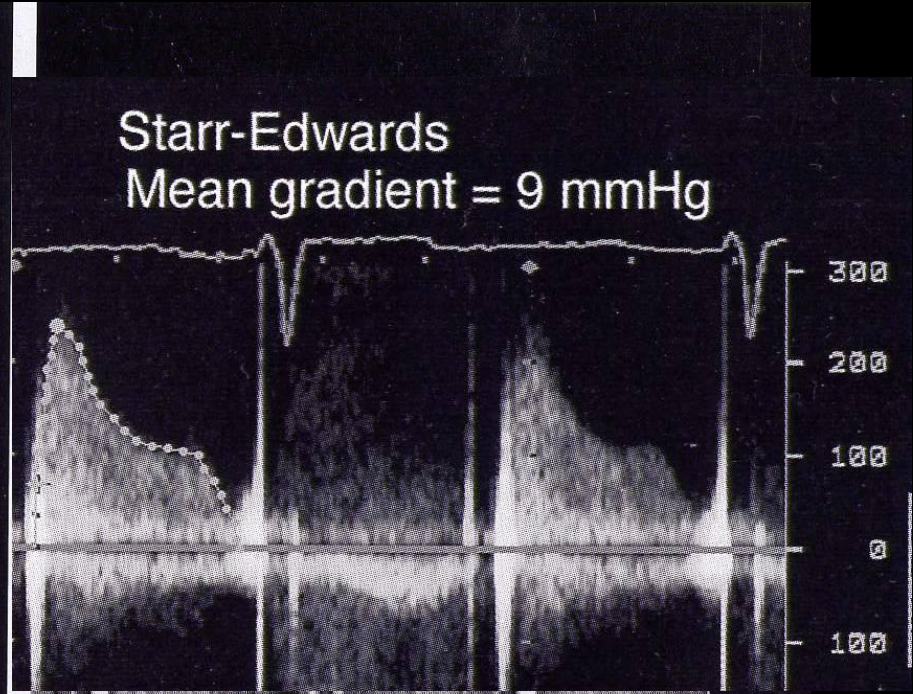
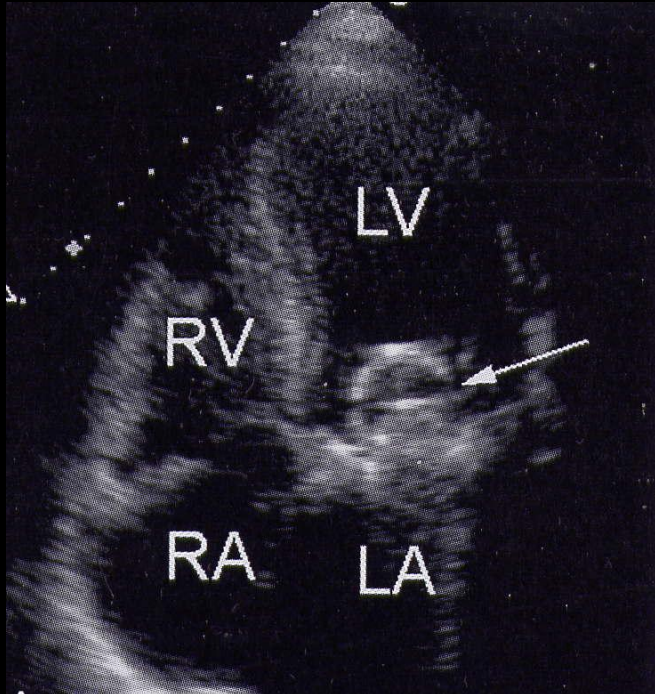
e: 0
v= 20

INTERV. 3000 MS

STARR-EDWARDS



Starr-Edwards



Size	Max gradient	Mean gradient	Peak velocity
28		7 +- 3	
30	12 +- 5	7 +- 3	125 +- 25
32	12 +- 4	5 +- 3	110 +- 25

Starr-Edwards

PAT T: 37.0C
TEE T <37.0C

