

# ***Pregnancy Management and Outcomes in Pregnant Women with Rheumatismal Mitral Stenosis***



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# Backgrounds

Still common  
in developing  
countries

High

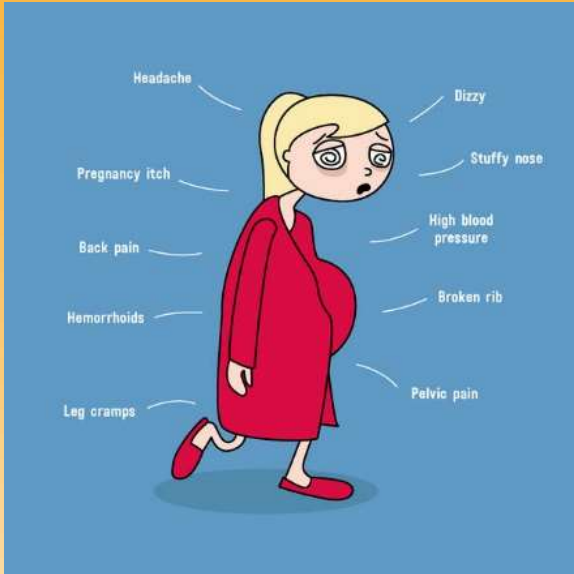
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# Methods

- **Prospective study**
- **54 consecutive patients with a diagnosis of rheumatismal mitral valve Stenosis**
- **Included those who may underwent percutaneous MV valvulotomy or followed up medically**
- **All women were examined by transthoracic echocardiography at the beginning of pregnancy and follow up**



# Results

<b>Maternal data</b>	
Mean age	32.1 ± 5 years
Mean LVEF	52.6 ± 4.6%
Mean MVA	1.2 ± 0.2 cm <sup>2</sup>
Mean MV gradient	8.4 ± 2.9 mmHg
Systolic Pulmonary Pressure	43.4 ± 16.3 mmHg
Abnormal RV function	53.4%
PTMC	37%
Therapeutic Abortion	1.9%
Prolonged maternal intensive care unit (ICU) stay (Arrhythmia, Dyspnea or pulmonary edema)	31.5%
Maternal prolonged hospital stay	3.7%
Atrioventricular nodal reentry tachycardia	1.9%
Maternal intensive care unit length of stay	37.89 ± 18.44 hours
Maternal mortality/ Stroke	0% /0%

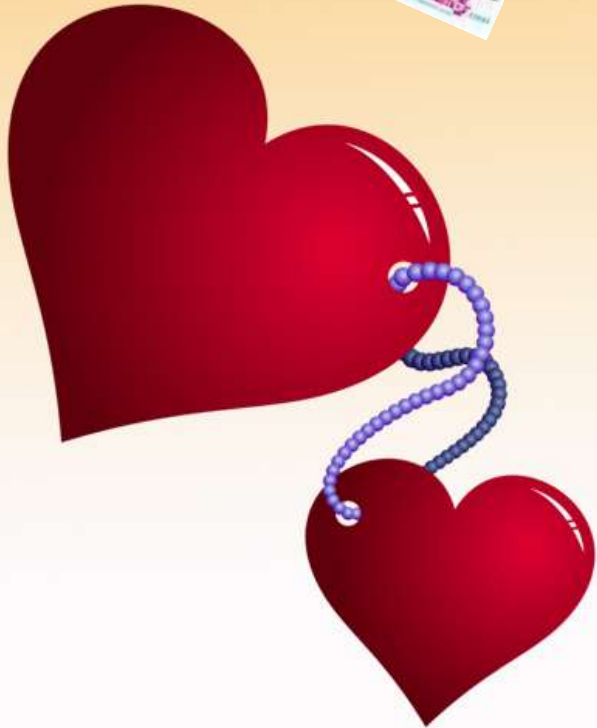
# Results

<b>Fetal data</b>	
Mean fetal birth weight	2754.7 ± 507.6 gr
Gestational age at delivery	37.5 ± 1.2 weeks
Prevalence of male to female babies	46.3% to 53.4%
Twin babies	5.6%
Previous abortion	5.6%
Hx of IUFD	18.5%
Oligohydramnios	3.7%
IUGR	19%
Fetal death	3.7%

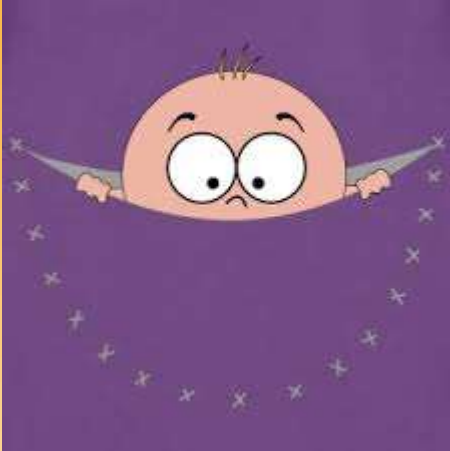
# Key points



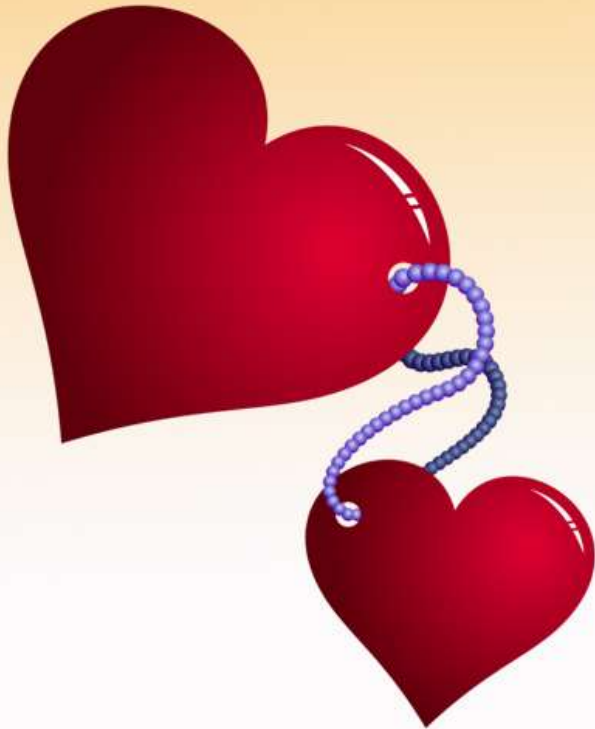
- **PTMC for patients with symptoms more than class II in spite of beta blocker and diuretic therapy, MVA less than 1 cm<sup>2</sup>, ladies with PAP more than 60 mmHg at resting echocardiography & Individuals with twin pregnancies**
- **Individualized, multidisciplinary care during labor particularly regard to its duration, fluid therapy and monitoring for pulmonary edema**
- **24 to 48 hours ICU stay even in the case of asymptomatic state after delivery**
- **Special care to babies with maternal beta blocker for fetal complication**



# Results



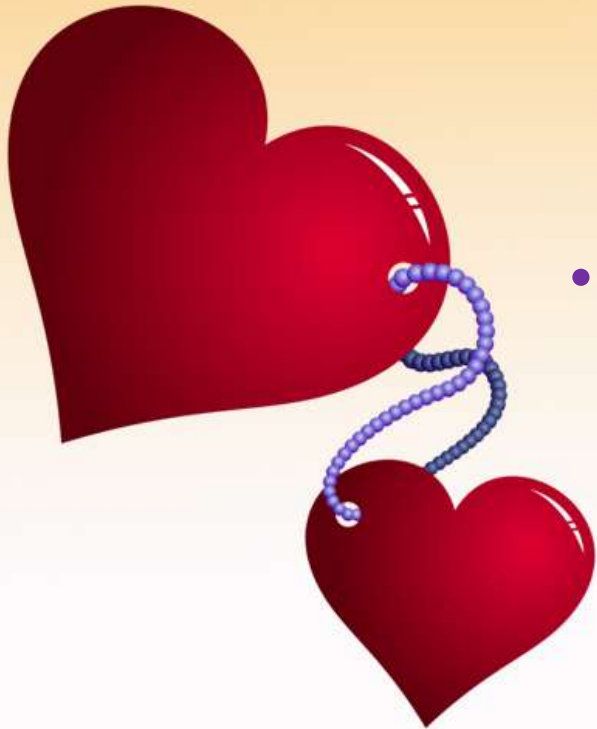
- The PAP was significantly higher in patients with complications compared with those without them ( $56.7 \pm 15.6$  vs.  $41.5 \pm 13.5$  mm Hg,  $P = 0.031$ )
- 3 of our cases had twin babies, all of them had received infertility treatments with in vitro fertilization (IVF) without any Hx of previous of cardiac disease
- All of them underwent PTMC and successfully delivered by caesarian section



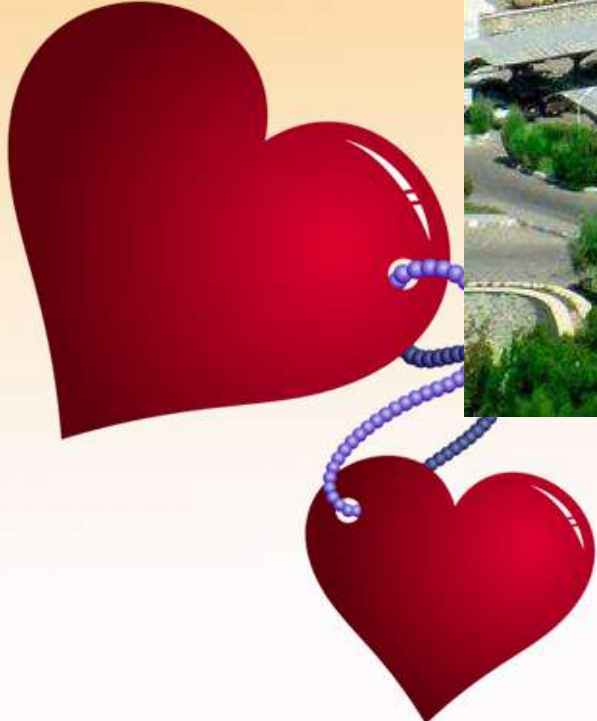
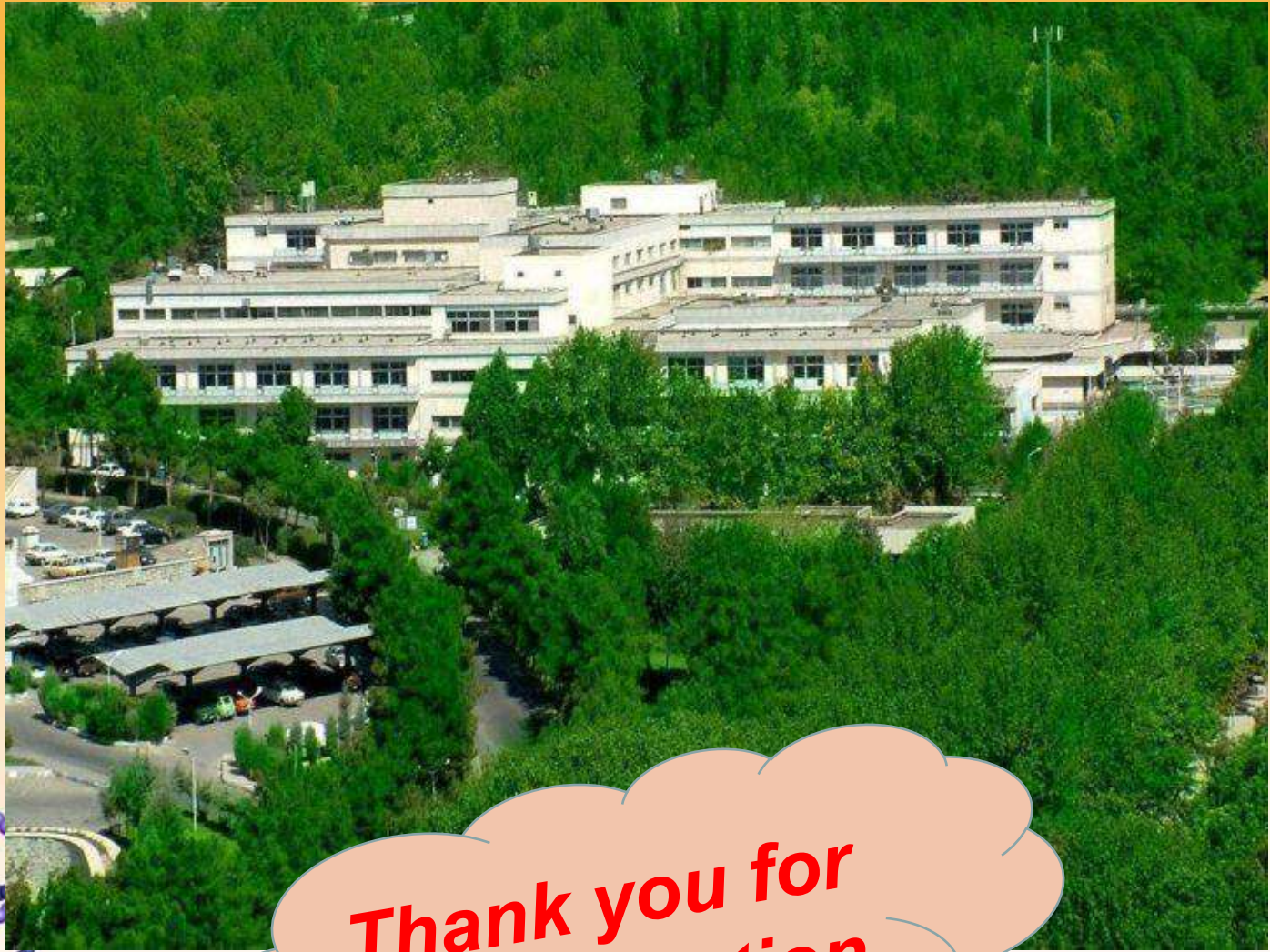
# Conclusion



- **Women with a diagnosis of moderately severe or severe rheumatismal MS can tolerate pregnancy at the cost of development of complications in the minority of cases but this needs continuous precise follow up and timely interventions**
- **Also we recommend a heart exam before assisted fertility that have the risk of multiple pregnancies**







**Thank you for  
your attention**