

## Methods of contraception in women with prosthetic heart valves in Shahid Rajaie Heart Center

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### Abstract

**Introduction:** In order to prevent the risk of thromboemboli in patients with prosthetic heart valves, anticoagulants are prescribed, but in spite of this precaution thromboemboli are seen in these patients. During pregnancy, because of changes in the hemostatic system, the risk of prosthetic heart valve thrombosis is increased. The use of warfarin, especially in the first 3 months of pregnancy or its change to heparin afterwards, may endanger the mother or the fetus. So, the general recommendation for these patients is prevention of pregnancy during reproductive years. This study was carried out to determine the best method of contraception in patients with prosthetic heart valves.

**Materials and Methods:** In this descriptive study which was undertaken in Shahid Rajaie Heart Center in the first 6 months of 2004, 155 married female patients, with a history of prosthetic heart valve replacement during the years 1973-2002 participated. A questionnaire was completed by a researcher for each patient according to the information given by her, her medical records and reproductive histories before and after surgeries. The collected data were analyzed by using SPSS software.

**Results:** Patients aged 24- 55 (mean age  $39.67 \pm 6.09$  years). The most prevalent surgical replacements were mitral valve replacement (57.4%), mitral and aortic valves replacement (23.2%) and isolated aortic valve replacement (14.2%). 9% of the patients had no pregnancies before the operation but 91% had 1-8 prior ones. 35.5% had undergone T.L. surgery and 16.8% of the patients' husbands had undergone vasectomy. Of these patients, 2.6% took oral contraceptive pills, 9% used IUDs, 33.5% withdrawal method, 9.7% condoms, 1.3% ingectable progesterone, and 17.4% two methods and 5.5% had undergone hysterectomy and 4.5% used no methods at all after valve replacement. 38 patients (24.5%) had 1-5 pregnancies after surgery, which were unwanted in 57.9% of the cases. The outcomes of these pregnancies were 51.7% normal births, 1.7% I.U.F.D.s and 46.6% abortions. In the majority of these patients the most prevalent contraceptive method was withdrawal. 81.82% of unwanted pregnancies occurred in women using withdrawal method, 9.09% in IUD group and 9.09% in those who used condoms.

**Conclusion:** Considering the high rate of unwanted pregnancies reported in this study and the accompanied fetal and maternal risks in patients with prosthetic heart valves, educating the patients postoperatively and use of the best contraceptive methods, vasectomy or tubal ligation, are recommended in these kinds of patients.

**Key Words:** Contraception, High Risk Pregnancy, Valvular Heart Disease, Anticoagulant Drugs, Prosthetic Heart Valve Replacement.

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