RATES OF OPERATIVE DELIVERY IN WOMEN WITH A HISTORY OF INFERTILITY

L. Tumanova, O. Kolomiiets, G. Grebinichenko
State Institution "Institute of Pediatrics, Obstetrics & Gynecology named academic Elena M. Lukyanova NAMS Ukraine", Kyiv, Ukraine

Introduction:

Pregnancies, that occurred after infertility treatment, both of endocrine and tubal peritoneal genesis, are characterized by high rate of obstetric and perinatal complications, such as: cervical insufficiency, premature birth, premature rupture of membranes, poly- and oligohydramnios, fetal infections, placenta previa, placental dysfunction, fetal growth restriction and distress, prolonged labor; these complications develop in 21-55% of patients. All these factors, lead, respectively, to an increase of operative delivery rate in this category of patients. Our aim was to study the rate of operative births in these women, depending on the factors, that caused infertility, and method of fertilization (spontaneous or IVF).

Materials and methods:

We analyzed the rate of operative births in 360 women with a history of infertility: 180 women who had a history of endocrine, tubal peritoneal or combined genesis infertility, and became pregnant only after IVF; 180 patients with the same history, but became pregnant spontaneously, after conservative and surgical treatment. Patients were divided into groups according to factor of infertility, and each group into subgroups according to the method of conception (subgroup a - after IVF, subgroup b – spontaneous).

Group I - pregnant women with endocrine infertility (Ia n=50, Ib n=50);

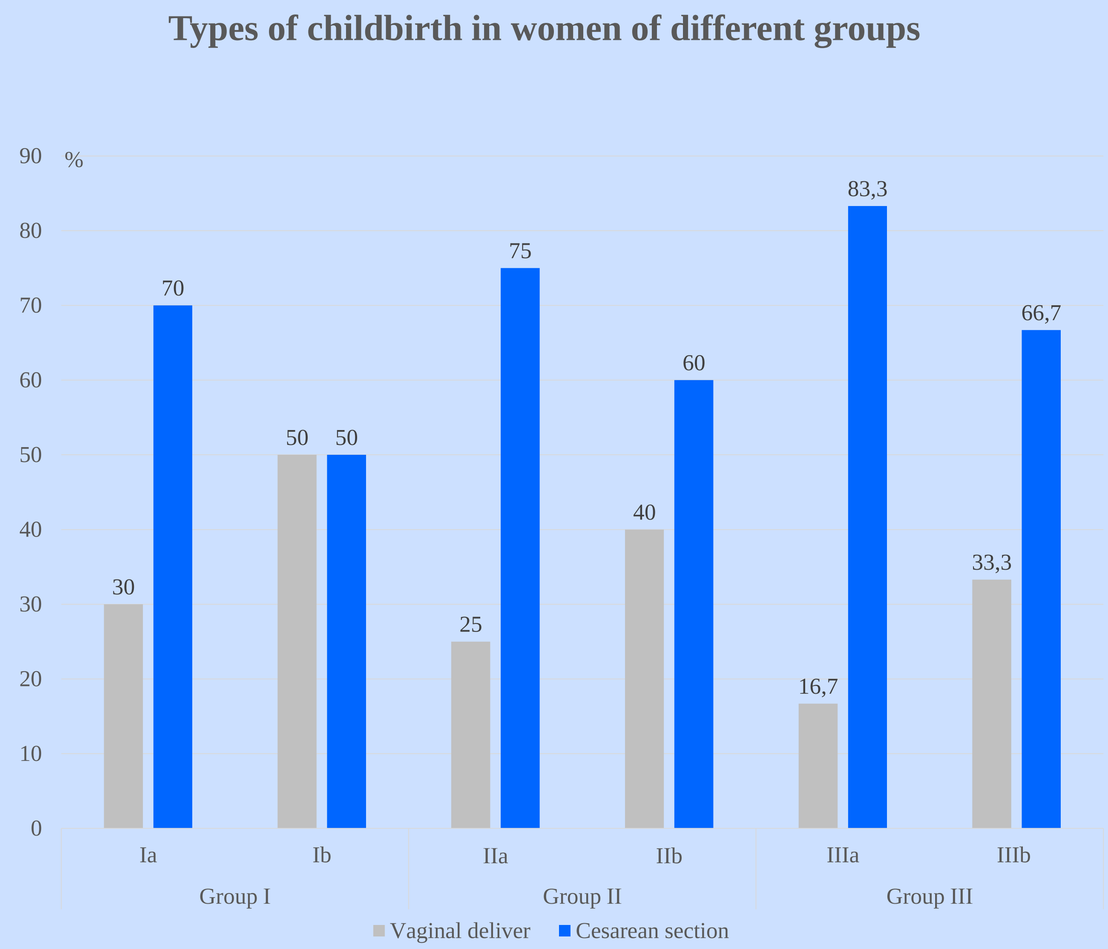
Group II - women with infertility of tubal peritoneal origin (IIa n=100, IIb n=100);

Group III - pregnant women with a combination of endocrine and tubal peritoneal factors of infertility (IIIa n=30, IIIb n=30).

groups.

Results:

Rate of operative births was very high in all patients: 60 %, 67.5% and 75% in groups I, II, III respectively, with no significant difference between them. C-section rate in subgroups was following: 70% in Ia vs 50 % in Ib (p=0.066), 75% in IIa vs 60% in IIb (p=0.034), 83.3% in IIIa vs 66.7% in IIIb (p=0.233). Comparison of data in combined subgroups according to method of conception showed, that in women with IVF pregnancies (Ia+IIa+IIIa) C-section rate was 75 %, which is considerably higher than in combined spontaneous subgroups (Ib+IIb+IIIb) – 58,3 %, p<0.01. Very high rate of C-section in all subgroups is possibly the result of high rate of gynecological/obstetric morbidity, numerous IVF attempts, previous recurrent pregnancy losses, high rate of multiple pregnancies in these patients.



Conclusions

These data indicate that pregnant women after treatment of endocrine, tubal peritoneal or combined genesis infertility are at high risk for surgical delivery. The highest incidence of operative births was found in women after IVF conception. We may conclude, that mode of delivery is more influenced by method of conception, than by infertility's etiology. Absence of statistical significance of highly different C-section rates in subgroups Ia and Ib, IIIa and IIIb can be explained by subgroups size