

large prospective randomized study is apparently needed to re-define the role of E<sub>3</sub> measurements in the management of the growth retarded fetus in the context of the current emphasis on biophysical monitoring.

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#### MICROSURGERY OR IVF FOR PATIENTS WITH TUBAL INFERTILITY?

Dear Sir,

In a recent article in your journal, Paterson comes to the conclusion that in vitro fertilization (IVF) is indicated as the primary treatment of tubal infertility on the basis of complete fimbrial obstruction (1). Of the 31 patients who underwent a salpingostomy procedure because of total lateral occlusion, 4 (13%) achieved a viable uterine pregnancy (VUP). Analysis of the IVF results from the same institution demonstrated a VUP rate of 16.3% per patient. These 417 patients underwent an average of about 2 lapa-

roscopies during the time interval studied. The above mentioned conclusion of the author is based on the difference of the percentages 13 and 16.3. Apart from the fact that this difference is not statistically significant, the conclusion of the author is based on the assumption that complete fimbrial obstruction constitutes a homogenous type of pathology.

In a recent study we analysed the importance of 4 factors (the nature and extent of adhesions, the macroscopic aspect of the endosalpinx and the thickness of tubal wall) for the prediction of subsequent conception in 108 patients (2). Each factor was classified into a score immediately after operation. After a follow-up of at least 2 years the prognostic information of the 4 factors was combined by applying discriminant analysis and correlated with the pregnancy outcome.

The results reveal the presence of 3 prognostic classes: a good one, an intermediate one and a poor one.

These results clearly demonstrate that even the group of patients with total fimbrial obstruction is a heterogeneous mixture of considerable variation in the degree of pathology and subsequently with a very different prognosis. In the first and relatively small good prognosis class of patients, the chances for an intrauterine or term pregnancy are excellent (77% and 59% respectively). We do not expect that IVF will ever equal such figures and that tubal surgery, therefore, should remain the first choice of treatment in this group. In the third group, comprising one third of all patients, the prognosis as to the achievement of an intrauterine pregnancy is extremely poor and indeed IVF offers a much better chance in this group. On the basis of analysis of the previous history, the hysterosalpingogram and the laparoscopic findings a similar prognostic class system can be derived allowing us to advise the patients to enter an IVF programme immediately or to offer her tubal surgery (unpublished results).

In our opinion tubal surgery will remain the primary mode of treatment in a group of patients with complete fimbrial obstruction of the tubes. Most probably the same conclusion applies for other types of tubal pathology.

Table 1.

Pregnancy outcome	Good Prognosis (1)	Intermediate prognosis (11)	Poor prognosis (11)	No. of all patients
Total no.	100% (27)	100% (44)	100% (37)	108
Full term	59% (16)	16% (7)	3% (1)	24
Abortions	18% (5)	5% (2)	0% (0)	7
Ectopics	4% (1)	27% (12)	16% (6)	19
Odds on success	3.5	0.26	0.03	
Probability of success	77% (21)	21% (9)	3% (1)	31

The actual number of patients is given in parentheses

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