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**Diagnosis and Treatment of Female Infertility on the Basis of Material
from the Ist Clinic of Operative Gynecology of Medical Academy
in Lublin in 1975—1982**

Diagnostyka i leczenie niepłodności kobiecej w materiale I Kliniki Ginekologii
Operacyjnej Akademii Medycznej w Lublinie w latach 1975—1982

Распознавание и лечение женского бесплодия на материале I Клиники
операционной гинекологии Медицинской академии в Люблине в 1975—1982 годы

About 20% of all married couples seek medical advice because of failure to conceive but only half of these cases are effectively treated. This indicates the importance of infertility from both medical and social point of view (2, 7, 10).

The aim of this work is analysis of diagnostic procedure, evaluation of results of treatment and course of pregnancy obtained after treatment of female infertility.

MATERIAL AND METHODS

In order to carry out total analysis of diagnostic and therapeutic management a special questionnaire was elaborated and sent out to 276 patients treated for infertility in our clinic in the years 1975—1982. 204 patients who filled our questionnaires were analysed. Among them 128 patients were treated for primary and 76 for secondary infertility. The average age of women with primary infertility was 27.1 years and with secondary 28.2 years. The basis for diagnosis of infertility was inability to conceive after minimum 12 months since the woman had decided

to have a child. Successful conception was considered as a positive result of treatment.

All cases of primary and secondary female infertility were divided into 3 causative groups: I — anatomical infertility, II — hormonal infertility, III — cervical infertility and infertility of unidentified origin. Diagnostic procedure included: case history, physical and gynecological examination, diagnostic laboratory procedures, monitoring of ovulation, examination of cervical mucous, cytological investigation of cervix, penetrating tests, histerosalpingography and tubal insufflation.

Various therapeutic methods were used. When hypoplasia uteri had been diagnosed intrauterine device, hormonal and balneologic treatment were applied. Anomalies of uterus and tumors of female reproductive system were treated operatively. In cases of occlusion of the oviduct conservative treatment supplemented by balneologic out-patient and sanatorium treatment and in sporadic cases operative procedures were undertaken. Conservative treatment included anti-inflammatory treatment and hydrotubation. In some cases needle aspiration of hydrosalpinx or ovarian cysts was performed via pouch of Douglas. In cases of hormonal infertility the following drugs were administered: Clomiphene, Mestranol, Chlormadinon, Bromocriptine and Epimestrol. Wedge resection of ovaries and cystectomy were also performed. In a third causal group various methods of treatment were used: artificial homologous insemination, electrocoagulation of cervix or chemical coagulation, removal of cervical mucous, dilatation of cervix and balneologic treatment.

Supervision of the course of pregnancy obtained after infertility treatment was carried out on the basis of clinical observation which included: physical examination, routine laboratory examinations, estimation of HCG and estrogens and other accessory investigations.

RESULTS

Time of infertility in studied patients was 13 to 120 months. Analysis of causes of primary and secondary infertility indicates majority of anatomical causes in both groups (Table 1). The average time of infertility lasted from 38.16 to 73.8 months. The average time of treatment was from 7.5 to 22.09 months (Table 2). From the total number of 204 treated patients 100 resulted in conception, which is 49.01% of successful treatment. Primary infertility constituted 58 cases (45.31%) and second-

Table 1. Amount and percentage of particular causes of infertility in studied material

Causes	Primary infertility		Secondary infertility	
	Number of cases	%	Number of cases	%
Anatomical	66	51.56	42	52.26
Hormonal	44	34.38	12	15.79
Others	18	14.16	22	28.95
Total	128	100	76	100

Table 2. Average time of infertility and duration of successful treatment

Causes of infertility	Average time of infertility /months/		Average time of treatment /months/	
	Primary infertility	Secondary infertility	Primary infertility	Secondary infertility
Anatomical	36.16	49.53	8.35	13.51
Hormonal	52.15	73.80	22.09	7.50
Others	47.6	50.57	20.50	10.75

dary 42 cases (55.26%) of successful treatment. The greatest number of cases of successful treatment was achieved in cases of occluded oviduct in secondary infertility (64.71%) and the lowest in treatment of secondary infertility of hormonal origin (33.33%) (Table 3). Per 100 pregnancies in

Table 3. Results of treatment of primary and secondary infertility

Causes of infertility	Primary infertility			Secondary infertility		
	Number of cases	Number of cured cases	%	Number of cases	Number of cured cases	%
Anatomical:						
Hypoplasia of rproductive system	18	8	44.44	4	2	50.00
Obstruction of oviducts	34	12	35.29	34	22	64.71
Cysts and tumors of reproductive system	14	6	42.85	4	2	50.00
Hormonal	44	20	45.45	12	4	33.33
Others	18	12	66.67	22	14	63.60
Total	126	53	45.31	76	42	55.26

70 cases pregnancy terminated in normal delivery, in 28 cases there were complicated pregnancies and deliveries and there were 2 cases of ectopic pregnancy. In primary infertility the percentage of complicated pregnancies and deliveries was 65.52%, while in secondary infertility it was 76.19%.

DISCUSSION

The applied division of clinical material into primary and secondary infertility points out to greater prevalence of primary infertility. The most numerous group were cases of anatomical infertility. The greatest amount of successful treatments was achieved in cases of oviduct occlusion and in secondary infertility it is much higher than in primary one. Long-lasting anti-inflammatory treatment and consistent performance of hydrotubation combined with balneologic treatment in greater degree

leads to obtaining positive effect than operative treatment. The number of drained oviducts ranged from 8 to 90% and the number of successful conceptions fluctuates about 20% of cases (4, 5, 10). While undertaking decision about operative treatment of infertility the rule should be that this treatment is a therapeutic necessity when all other methods of diagnostic procedure were used up. Quite good results of treatment of infertility due to hypoplasia uteri were obtained by applying IUD. Balneological and hormonal treatment seems to be logical in case of hypoplasia uteri. An attempt to find out a special therapeutic method in women with infertility due to hormonal disturbances did not give definite results although in our material Epimestrol appeared to be quite successful.

From the survey of literature and our findings it may be concluded that some complications such as: spontaneous abortions, stillbirth, prematurity, great frequency of operative deliveries and cesarean section, urinary tract infections, EPH gestosis and foetal malformations are characteristic of pregnancies obtained after infertility treatment regardless the cause of infertility (1, 3, 10). In cases of cervical infertility a great percentage of successful treatment is obtained using artificial insemination (6, 8, 9). Small number of cases treated with this method in our material does not entitle us to draw our own conclusions. Great percentage of successful treatment in the group of cervical infertility and of unexplained origin obtained in our material is certainly connected with suitable diagnostic procedure in which penetrative tests proved to be very useful and the fact that often diagnostic procedure itself leads to healing.

Conclusions

1. The most numerous group were cases of anatomical infertility.
2. The greatest amount of successful treatments was achieved in cases of oviduct occlusion and in secondary infertility it was much higher than in primary one.
3. Great number of methods of treatment shows that we are still not able to learn extremely complicated pathomechanisms of ovarian failure and to find out fully successful and safe way of its treatment.
4. Guidance and prenatal care of pregnancy obtained after treatment of infertility should be intensified as it is high-risk pregnancy.

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STRESZCZENIE

Przedstawiono retrospektywną analizę postępowania diagnostycznego, ocenę wyników leczenia oraz przebiegu i losów ciąży uzyskanej po leczeniu niepłodności pierwotnej i wtórnej u kobiet hospitalizowanych w I Klinice Ginekologii Operacyjnej w latach 1975—1982. Analizą objęto 204 kobiety, które odpowiedziały na rozesłaną ankietę. Najliczniejszą grupę stanowiły przypadki niepłodności uwarunkowanej anatomicznie, przy czym udział tego czynnika przewyższał sumę pozostałych czynników przyczynowych (to jest hormonalnych, szyjkowych i nie wyjaśnionego pochodzenia). Największą liczbę wyleczeń uzyskano w przypadkach niedrożności jajowodów, przy czym w niepłodności wtórnej była ona znacznie wyższa niż w pierwotnej. W 30% przypadków stwierdzono powikłania w przebiegu ciąży i porodu. Nadzór i opieka prenatalna w ciąży uzyskanej po leczeniu niepłodności powinny być zintensyfikowane, gdyż jest to ciąża wysokiego ryzyka.

РЕЗЮМЕ

данная работа включает ретроспективный анализ диагностического поведения в оценке результатов лечения, а также наблюдения хода и судьбы беременности, являющейся результатом лечения первичного и вторичного бесплодия у женщин госпитализированных в I Клинику операционной гинекологии в 1975—1982 годы. Анализировано 204 женщины, которые выполнили разосланные опросные листы. Самую большую группу становили случаи бесплодия ана-

томически обусловлены, при чем фактор анатомический превышал сумму остальных причинных факторов (т.е. гормональных, цирвикальных и неразъясненного происхождения). Самые лучшие результаты лечения достигнуто в лечении непроходимости яйцеводов, особенно при вторичном бесплодии, чем при первичном. В 30% случаев замечено осложнения в ходе беременности и родов. Надзор и пренатальный патронаж беременности, выступившей вследствие лечения бесплодия, должны быть более развиты, ибо эта беременность бывает очень рискованной.