

MULTIPLE PREGNANCY FOLLOWING CLOMIPHENE THERAPY

(Report of 2 cases with Review of literature)

by

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Here we are reporting 2 cases of multiple pregnancies, following clomiphene therapy, one of which was a twin pregnancy and the other triplet.

Case I—Twins

Mrs. S. 23 years. Para I Gravida II. H/o Pre-eclampsia and intrauterine death in previous pregnancy. Investigated for secondary infertility. HSG: Bilateral spill + Premenstrual D & C. Proliferative Endometrium. LMP Sept. 28, 1981. Had Fertyl 50 mg daily x 5 days from the Oct. 2nd to Oct. 6th, 1981. Conceived in the same cycle. EDD was July 5th. Patient had a premature twin delivery on 1st May, 1982. Both babies Male, 1 Kg. and 1.1 Kg. each. Placenta was dichorionic. Only the II baby survived

Case II—Triplets

Mrs. S. 27 years.
Married Jan. 79 Investigated for primary infertility.

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Premenstrual D & C (April 81) Proliferative Endometrium HSG (June 81) Lt. side block, Rt. side tube normal.

Had injection placentex x 20.

LMP Aug. 20th 81. Had Fertyl 50 mg. daily x 5 days from 25th to 30th of August 81 and conceived in that cycle. On Jan. 23, 1982 Twins + Hydramnios was clinically suspected.

X-ray taken—Triplet. (Fig. 1)

Admitted on 13-4-82 with mild oedema feet, BP normal EDC was May 27th. Delivered on 27th April, 3 alive female babies (Fig. 2) and the placenta suggesting tri-ovular triplet. (Fig. 3). Babies 1.8, 1.7, 1.4 Kg. all survived.

Review of Literature

Shearman reports that about 1/10 conception due to clomiphene treatment will be multiple. While overwhelmingly these are twin pregnancies, triplets, quadruplets and quintuplets are also recorded. Although considerably lower than that following gonadotropin therapy (20-40%) the multiple pregnancy rate following clomiphene therapy is about 7 times that of normal incidence.

Hack *et al* (1972) had a series with 9.4% multiple pregnancy rate. Harlap

TABLE I

Author	No. of clomiphene treated pregnancies	Number of multiple pregnancy	Percentage of multiple pregnancy
1. Mac Gregor et al	1337	136	10%
2. Kistner (1968)	1938	159	8.2%
3. Merrel laboratories	2369	186	7.83%
4. Adashi	86	11	12.8%
5. Pillai (1982)	14	2	14.3%

(1976) in Israel had an incidence of 13% multiple pregnancy, Rajan (1980) with AID following timing of ovulation with clomiphene had the experience of 3 twins and one triplets out of 70 pregnancies (5.7%).

Another study at the John Hopkins University compared the pregnancy outcome of 86 clomiphene treated pregnancies with that of 51 pregnancies following bilateral wedge resection of ovaries. Twinning was limited to the clomiphene treated group that too a significant percentage of 12.6% (Table III).

TABLE II
Merrel National Laboratories—Bulletin 1972

	No.	Percentage
1. Total clomiphene pregnancies	2369	100
2. Twins	185	6.9
3. Triplets	11	0.5
4. Quadruplets	7	0.3
5. Quintuplets	3	0.13
Total multiple pregnancies	186	7.83

TABLE III
Multiple Pregnancy Following Treatment of Polycystic Ovaries

Pregnancies after	Total number	No. of twins	Percentage
1. CLOMIPHENE treatment	86	11	12.6%
2. Wedge resection of ovaries	51	nil	0

TABLE IV
Comparison Between Clomiphene and Gondotropin

	Gonadotropin	Clomiphene
1. Ovulation rate	90% (Gombell and Ross 1966)	70-80% (Kistner 1965)
2. Pregnancy rate	50-70%	40% (Kistner)
3. Multiple pregnancy	20-40% (Gemzell 1966)	10% (different series)

The main consideration here is the increased incidence of multiple pregnancy which should be explained to the patient and her husband before the initiation of treatment.

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See Figs. on Art Paper I