A quintuplets pregnancy following clomiphene-induced ovulation is presented as a matter of record. The importance of keeping in mind such a serious complication is emphasized in order to achieve early diagnosis and appropriate management. In pregnancies following clomiphene treatment, close supervision is imperative as soon as the pregnancy is evident.

Department of Obstetrics and Gynecology, Faculty of Medicine, University of Tehran,
Induction of ovulation is frequently used in the treatment of infertility. It is mainly carried out by the use of clomiphene citrate (CC), human menopausal gonadotropin, and human chorionic gonadotropin, either separately or in combination (1,5). Ovarian enlargement and overstimulation are the most frequent side effects of clomiphene administration (3,4).

The true incidence of multiple pregnancy formation following clomiphene-citrate therapy is not known. Furthermore, the manner in which clomiphene citrate is prescribed for the treatment of infertility is not yet standardized (5).

A case report of quintuplets following clomiphene-induced ovulation, diagnosed by ultrasound, and confirmed after delivery, is presented to illustrate these points.

Medical rarities warrant publication not only as clinical curiosities, but also to serve as a warning to other physicians of possible dangers in particular modes of therapy. The following case presentation prompted discussion in two areas. First the indications for the use of clomiphene, and second, the formation of a quintuplets after clomiphene therapy.

CASE REPORT

T.T., a 23-year-old gravida 0 para 0 was seen on March 1983, 3 months after her marriage. She presented a history of irregular menstruation since menarche at age 14 years with normally developed secondary sexual characteristics. On gynecological examination enlargement of the left ovary was noted with a clinical diagnosis of poly-
Quintuplets pregnancy following clomiphene-induced 81
cystic ovary (PCO). To help ovulation and to overcome
the irregular menstruation, the patients began clomiphene
therapy on March 1983, with a dosage of 100 mg/day
for 5 days + medroxyprogesterone 10 mg/day for 2 months.
The patients was instructed to have intercourse regularly
during and after clomiphene therapy. In the next visit
on May 1983, two months after CC treatment, the patient
pregnancy tests were positive and she was pregnant. There
were yet some spottings left, and the uterus size was
more than the expected weeks of gestation. A preliminary
diagnosis of hydatidiform mole or multiple pregnancy was
made. The patient was referred to the Obstetrics-Gynecology Ultrasound facility because of large-for-date uterus
associated with the pregnancy. The ultrasound examination revealed a probable quintuplet pregnancy. Figure 1
shows three of the five fetuses. It was not possible to
have all five fetuses in a single photograph, but the
heart beats of all five fetuses were recorded. The patient
was hospitalized for 3 days and ethanol infusion was
instituted to prevent abortion. The patient was suggested
to have a full bed rest. This brought the pregnancy to
the fifth month. At the beginning of the 6th month membran-
ences were ruptured and five fetuses were delivered.
Because of the placental retention a curage under general anesthesia was performed. None of the five fetuses
survived one hour after delivery(Figure 2). The post-delivery course was uneventful and the patient was dis-
charged from the hospital on the 3rd day of hospitaliza-
tion. Five months later the patient was seen for the
second pregnancy which resulted in the delivery of a
healthy girl.
Figure 1 - The scan of the uterus shows three of five fetuses.

Figure 2 - Five neonates 2 hours after delivery.
Quintuplets pregnancy following clomiphene-induced 83

DISCUSSION

The first successful ovulation with clomiphene citrate was reported in 1961. Currently, CC is used for the induction of ovulation in anovulatory patients in doses of 50 to 100 mg/day for a maximum of 5 days. Three courses of therapy are the maximum number recommended to achieve ovulation. With the doses recommended above, 75% of patients will ovulate (6).

The incidence of twin pregnancy in the general population is approximately 1 in 90 births. The incidence of multiple gestation in clomiphene-induced pregnancies is approximately 10 in 100 births, almost entirely dizygotic gestations (2). A quintuplet pregnancy following clomiphene citrate induction of ovulation is a rare occurrence (7).

Multiple pregnancies involving three or more fetuses present special problems to the obstetrician-gynecologist and sonographer. It is important for both professionals to be alert to the higher incidence of multiple pregnancy associated with ovulation induction by this medication. Careful attention to scanning technique is also important in verifying the number of fetuses present in multiple pregnancies.

REFERENCES

1. Bishop, P. M. F.
Clomiphene.

3. Scommegna, A.

4. Smith, D.H., Picker, R.H. and Sinosich, M.J.

5. Talbert, L. M.

6. Thorneycroft, I. H.

7. Warner, R. W., Sharma, S. and Fox, H.F.