

Intrauterine fetal demise of one twin baby and survival of the fittest”

Dr. Sushma Sharma, (DGO, DNB, Professor), Dr. Shraddha D. Patil (MBBS,PG student)

Department of Obstetrics & Gynaecology,
MIMER Medical College.

3 Sources of support if any; NIL

4. Address for correspondence - the name, address, phone numbers and email address of the corresponding contributor

Dr.Sushma Sharma,

Dept of Obgy,MIMER Medical College,Talegaon, Pune, Maharashtra

sushmas07@gmail.com

5. Word count (text only, exclusive of title, abstract, references, tables, and figure legends); 1272

6. Number of figures; 2

7. Number of tables; NIL

8. Address for correspondence - the name, address, phone numbers and email address of the corresponding contributor

Dr.Sushma Sharma,

Dept of Obgy,MIMER Medical College,Talegaon, Pune, Maharashtra

Sushmas07@gmail.com

CASE REPORT

“Intrauterine fetal demise of one twin baby and survival of the fittest”

Dr. Sushma Sharma, Dr. Shraddha Patil

Department of Obstetrics & Gynaecology, MIMER Medical College.

Abstract

We report a case which aims to highlight how multiple problems may exist in a single patient, yet can be managed with a favourable outcome. This patient of ours had infertility, RPL, genital TB. After successful treatment of infertility and TB, she had intrauterine demise of 1 baby of twin, thereby presenting multiple challenges, yet had a good outcome.

Key Words: RPL, Demise of 1 twin.

doi: 10.15713ins.mmj.10

Clinically recognized pregnancy loss is common accounting for 15 to 25% of all pregnancies. Recurrent pregnancy loss is defined as 2 or more failed clinical pregnancies (1). It is estimated that fewer than 5% woman experience 2 consecutive miscarriages and only 1% experience 3 or more (2). Multiple gestations have become one of the most common high-risk conditions encountered nowadays. Twins represent approximately 3% of all live births (3).

CASE REPORT:

35 years old elderly G4A3 with history of recurrent pregnancy loss registered with us at 3 month of twin pregnancy for safe confinement. She had a non consanguineous marriage since 5 years. She was taking treatment for primary infertility. She had undergone laparoscopy in 2012, hysteroscopy in January 2013 as a part of her infertility management

She conceived for first time in March 2013 after 5 cycles of Intra Uterine Insemination, which turned out to be missed abortion at 6 weeks. Second conception was after 7 cycles of Intra Uterine Insemination in November 2013, which turned out to be missed abortion at 11 weeks. She was diagnosed to have

genital tuberculosis with help of endometrial tissue TB PCR and had received anti tubercular therapy (AKT) for 9 months in 2014

During AKT, she conceived with 1cycle of In Vitro Fertilization in May 2014, which was again a missed abortion at 12 weeks. Karyotyping of abortus was suggestive of Monosomy.

Then she conceived spontaneously in November 2014. At 14+1 weeks pregnancy she came with Per Vaginal bleeding. Ultrasound (USG) was suggestive of diamniotic dichorionic twin pregnancy with

Fetus A – caudal fetus with IUD with cystic hygroma and absent liquor, sac was at os

Fetus B – cranial fetus was normal

Patient and her relatives were counselled regarding patient's condition and risks involved to the mother and fetus on continuation of pregnancy. She was managed conservatively with monitoring of coagulation profile [PT INR, APTT, FDP] and USGs at regular intervals which were normal for the gestational age. Medications like progesterone supplements were given throughout pregnancy. She underwent cervical encirclage at 19 wks of pregnancy. Rest of the ANC period was uneventful. At 37 wks pregnancy she underwent an elective caesarean section for breech presentation and delivered a healthy female term baby 2.5 kg. Second twin and its placenta was removed from the uterine cavity and sent for HPR. It was suggestive of fetal papyraceous. Placenta was examined and was found to be diamniotic and dichorionic.

Postnatally baby's karyotype was normal

FETUS PAPYRACEOUS months,

HEALTHY FEMALE BABY AT 2 MONTHS FOLLOW UP. public



DISCUSSION:

Recurrent Pregnancy Loss is defined as three or more consecutive miscarriages in first trimester of pregnancy. (2,4) The American Society for Reproductive Medicine defines RPL as two or more failed pregnancies, which have been documented by either ultrasound or histopathological examination.(1) RPL affects 0.4 - 1% of couples.(5)

Genital tuberculosis (endometrial and salpingoophoritis) is a known cause of infertility in women (6, 7). Incidence of genital tuberculosis in infertility clinics is around 17.4% in India (8). Kulshreshtha et al. had reported 22.9% spontaneous pregnancies following genital TB treatment (9). Our patient fits into definition of recurrent pregnancy loss and she was further evaluated and diagnosed to have genitourinary tuberculosis. She received anti tubercular therapy and conceived spontaneously within 1 year.

The incidence of fetus papyraceous has been reported as 1 in 12,000 pregnancy (10) and ranges between 1:184 and 1:200 twin pregnancies (11). The term fetus papyraceus is used when intrauterine fetal demise of a twin early in pregnancy occurs, with retention of the fetus for a minimum of 10 weeks resulting in mechanical compression of the small fetus such that it resembles parchment paper (12). Attributable causes for the IUD of one fetus include twin-twin transfusion syndrome, membranous or velamentous cord insertion, true cord knot, cord stricture, placental insufficiency, and congenital anomalies (13). The primary concern of one dead fetus in twin pregnancy is its effect on mother and surviving co-twin. In dichorionic twins, the prognosis for the surviving twin is relatively better and immaturity is the risk factor. In the case of monochorionic twins, the prognosis is poor and associated with neurological damage in the survivor (14). Our patient had dichorionic diamniotic twins. Maternal complications include pre-term labour, infection from a retained fetus, severe puerperal haemorrhage, consumptive coagulopathy, and obstruction by a low lying fetus papyraceus causing dystocia leading to caesarean delivery. It is necessary to make a timely diagnosis to prevent severe complications. Maternal coagulopathy rarely develops within 1-month after the fetal death, although, if retained longer, approximately 25% will develop a coagulopathy. Hence close follow up with monitoring of coagulation profile every fortnight is mandatory. This patient was managed

conservatively and she underwent caesarean section without any fetal or maternal complications.

CONCLUSION:

Thus we conclude,

Evaluation of Recurrent pregnancy loss should be commenced after 2 consecutive clinical pregnancy losses. The protocol for evaluation of recurrent pregnancy loss should include screening for chromosomal disorders, antiphospholipid antibody syndrome, infections, uterine anomalies, hormonal and metabolic disorders.

The primary concern in management of one dead fetus in twin gestation is its effect on the surviving fetus and the mother. To avoid complications, early intrauterine diagnosis of fetal demise of one baby by ultrasound is a must and conservative management in the form of coagulation profile monitoring and USG at regular intervals for better maternal and neonatal outcome is critical.

We report this case to highlight how multiple problems may exist in a single patient, yet can be managed with a favourable outcome. This patient of ours had infertility, RPL, genital TB and intrauterine demise of 1 baby of twin, thereby presenting multiple challenges, yet had a good outcome.

REFERENCES:

1. Practice Committee of the American Society for Reproductive Medicine. Definitions of infertility and recurrent pregnancy loss. *FertilSteril*2008;89:1603.
2. Stirrat GM. Recurrent miscarriage. II: Clinical associations, causes, and management. *Lancet* 1990;336:728-33.
3. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacher F, Kirmeyer S. Births: Final Data for 2004. National Vital Statistics Report. Vol 55. No 1. Atlanta, GA: Centers for Disease Control and Prevention; 2005.
4. Shamsi MB, Venkatesh S, Pathak D, et al. Sperm DNA damage & oxidative stress in recurrent spontaneous abortion(RSA). *Indian J Med Res* 2011;133:550-1.
5. Salat-Baroux J. Recurrent spontaneous abortions. *ReprodNutr Dev* 1988;28:1555-1568.

6. Jahromi BN, Parsanezhad ME, Ghane-Shirazi R. Female genital tuberculosis and infertility. *Int J GynaecolObstet* 2001;75(3):269-272
7. Ojo BA, Akambi AA, Odimayo MS, Jimoh AK. Endometrial tuberculosis in the Nigerian middle belt: an eight-year review. *Trop Doct*2008;38:3-4
8. Schaefer G. Female genital tuberculosis. *ClinObstetGynecol*1976;19:223-39..
9. Kulshrestha V, Kriplani A, Agarwal N, Singh UB, Rana T. Genital tuberculosis among infertile women and fertility outcome after antitubercular therapy. *Int J GynaecolObstet*2011;113:229-34.
- 10.Rathi BA, Rathi SM. Fetus papyraceous - a case report. *J ObstetGynaecol India*2003;53:188.
- 11.Woo HH, Sin SY, Tang LC. Single fetal death in twin pregnancies: review ofthe maternal and neonatal outcomes and management. *Hong Kong Med J* 2000Sep;6(3):293-300.
- 12.Dickey RP, Taylor SN, Lu PY, Sartor BM, Storment JM, Rye PH, et al.Spontaneous reduction of multiple pregnancy: incidence and effect on outcome.*Am J ObstetGynecol* 2002 Jan;186(1):77-83.
- 13.Akbar M, Ikram M, Talib W, Saeed R, Saeed M. Fetus papyraceus: Demise of one twin in second trimester with successful outcome in second twin at term. *Prof Med J* 2005;12:351-3
- 14.Fusi L, Gordon H. Twin pregnancy complicated by single intrauterine death. Problems and outcome with conservative management. *Br J ObstetGynaecol*1990;97:511-6.

Copyright form

Scan a copy signed by all authors and submit it with your covering letter.

Manuscript Title:

"Intra-uterine fetal demise of 1 twin baby & survival of the fittest"

I/we certify that I/we have participated sufficiently in contributing to the intellectual content, concept and design of this work or the analysis and interpretation of the data (when applicable), as well as writing of the manuscript, to take public responsibility for it and have agreed to have my/our name listed as a contributor.

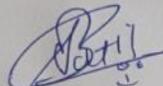
I/we believe that the manuscript represents valid work. Neither this manuscript nor one with substantially similar content under my/our authorship has been published or is being considered for publication elsewhere, except as described in the covering letter. I/we certify that all the data collected during the study is presented in this manuscript and no data from the study has been or will be published separately. I/we attest that, if requested by the editors, I/we will provide the data/information or will cooperate fully in obtaining and providing the data/information on which the manuscript is based, for examination by the editors or their assignees. Financial interests, direct or indirect, that exist or may be perceived to exist for individual contributors in connection with the content of this paper have been disclosed in the cover letter. Sources of outside support of the project are named in the covering letter.

I/We hereby transfer(s), assign(s), or otherwise convey(s) all copyright ownership, including any and all rights incidental thereto, exclusively to the Journal, in the event that such work is published by the Journal. The Journal shall own the work, including

1. copyright;
2. the right to grant permission to republish the article in whole or in part, with or without fee;
3. the right to produce preprints or reprints and translate into languages other than English for sale or free distribution; and
4. the right to republish the work in a collection of articles in any other mechanical or electronic format.

We give the rights to the corresponding author to make necessary changes as per the request of the journal, do the rest of the correspondence on our behalf and he/she will act as the guarantor for the manuscript on our behalf.

All persons who have made substantial contributions to the work reported in the manuscript, but who are not contributors, are named in the Acknowledgment and have given me/us their written permission to be named. If I/we do not include an Acknowledgment that means I/we have not received substantial contributions from non-contributors and no contributor has been omitted.


Di. Shuddha Patil

Name
Dr. Sushma
Sharma

Signature


Date

3rd Sep^r.
2016