European Journal of Molecular & Clinical Medicine

ISSN 2515-8260 Volume 9, Issue 7, Summer 2022

CASE REPORT

Abortions - An uninvited echo of embryo reduction

[1]Dr Hemant Deshpande, [2]Dr Madhukar Shinde, [3]Dr Nikita Samantara, [4]Dr Pratap Pharande

[1]Head of Department, [2]Associate Professor & IVF Consultant, [3]Chief Resident, [4]Assistant Professor, Department of Obstetrics & Gynaecology, Dr DY Patil Medical College & Hospital, Pune, Maharashtra, India

Correspondence:
Dr Nikita Samantara
Chief Resident, Department of Obstetrics & Gynaecology, Dr DY Patil Medical College & Hospital, Pune, Maharashtra, India

Received: 13 September, 2022 Accepted: 18 October, 2022

ABSTRACT

This case report addressed the occurrence of post embryo reduction complications in IVF treated multiple gestation pregnancy.

AIMS & OBJECTIVES

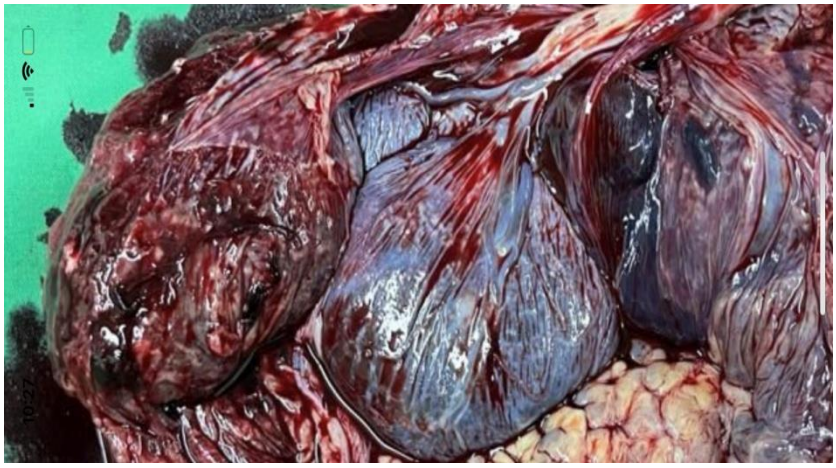
To draw attention to the occurrence of post embryo reduction complications in IVF treated multiple gestation pregnancy.

CASE REPORT

30y/ Primigravida with 15 weeks by gestational age presented to OPD with bleeding PV since 10 days with passage of clots. On eliciting history patient was a case of IVF pregnancy conceived after 11 years of marriage. Reports showed that at the13th week scan – a triplet pregnancy was detected with the monochorionic pair overlying the os.

The couple was explained the benefits and risks of embryo reduction and expectant management and the couple decided to carry further only one embryo. After the procedure the cardiac activity of the remaining embryo was documented and demonstrated. She complained of spotting since post operative day 6 of the procedure. Now, on presentation she had tachycardia & was hypotensive. On per abdominal examination, uterus was 18 - 20 weeks, no tenderness elicited. Per vaginum examination showed active bleeding.

A scan was done which showed a thickened endometrium with products of conception. Her Hb rapidly dropped from 11.9 to 6.8. The patient was explained about pregnancy failure, considering the haemodynamic instability & large uterus size as compared to gestational age a decision for hysterotomy was taken. On table, there was considerable amount of blood loss as the products were removed along with placenta which was overlying the os. Patient was managed with oxytocin, methergine, blood and blood products. Patient was stabilised and shifted to recovery for observation.



DISCUSSION

The abortion was attributed to the risk of miscarriage associated with embryo reduction with high risk factors like maternal BMI, triplets reduced to singleton, posterior placenta completely covering internal os, reduction of monochorionic twin pair which was less approachable as it was overlying the os.

At the outset, An Obstetrician must respect patients ’autonomy regarding whether to continue or reduce a multifetal pregnancy. Only the patient can weigh the personal importance of the medical, ethical, religious, and socioeconomic factors to determine the best course of action. The risks of perinatal morbidity and mortality increase with each additional embryo.

The risk of spontaneous loss of the entire pregnancy is 25% for quadruplets, 15% for triplets, and 8% for twins. They must be offered non directive counselling and appropriate resources which include maternal–foetal medicine specialists, neonatologists, mental health professionals, child development specialists, support groups, and clinicians with procedural expertise in multi embryo pregnancy reduction. (1)

Multifetal pregnancies should be prevented whenever possible. It is preferable to avoid the risk of higher-order multifetal pregnancy by limiting the number of embryos to be transferred or by cancelling a gonadotropin cycle when the ovarian response suggests a high risk of a multifetal pregnancy and thus minimize the need for embryonic reduction and should be practiced by all physicians who treat women for infertility (1)

In women with a triplet pregnancy, embryo reduction increases gestational age at birth with 3 weeks as compared with ongoing triplets. However, there the impact on neonatal survival is limited (2)

In women with a triplet pregnancy, embryo reduction increases gestational age at birth with 3 weeks as compared with ongoing triplets. However, there the impact on neonatal survival is limited (2)

Pregnancy outcome, foetal mortality and morbidity in triplet pregnancy after multi embryonic reduction are directly correlated with duration and amount of first-trimester bleeding. (3)

Over the past 25 plus years, data from around the globe have shown that pregnancy outcomes are vastly improved by reducing the number of embryos in multiples. The most conservative of commentators have long since accepted the efficacy or reduction of triplets or more. The issue then shifts to an ethical one that will never be universally accepted, but the argument is that from an autonomy and public health perspective that embryo reduction needs to be seen as a necessary but hopefully increasingly rare procedure (4)

CONCLUSION

The procedure of embryo reduction in an IVF treated pregnancy can lead to abortions and in this case life threatening consequences of antepartum & post-partum haemorrhage in the

background of haemodynamic instability. Embryo reduction procedure in an IVF conceived multiple pregnancy has to be done meticulously and followed up for at least 2 weeks to avoid any such untoward incidences. To sum up, increased IVF conceptions warrant more vigilance during embryo reduction.

REFERENCES

1. ACOG Committee Opinion (https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/09/multifetal-pregnancy-reduction)
2. van deMheen L, Everwijn SM, Knapen MF, Oepkes D, Engels M, Manten GT, et al. The effectiveness of multifetal pregnancy reduction in trichorionic triplet gestation. Am J ObstetGynecol 2014;211:536.e1–6
3. Shalev J, Meizner I, Mashiach R, Bar-Chava I, Rafael ZB. Multifetal pregnancy reduction in cases of threatened abortion of triplets. Fertil Steril. 1999 Sep;72(3):423-6. doi: 10.1016/s0015-0282(99)00296-4. PMID: 10519611.
4. Evans MI, Andriole S, Britt DW. Fetal reduction: 25 years 'experience. Fetal DiagnTher 2014;35:69–82.