ORIGINAL PROF-471

AETIOLOGY OF TRANSVERSE LIE AT TERM

Dr. Aslam Mahmood Malik
Senior Registrar, Deptt: of Obstetrics & Gynaecology
Unit-I, Bahawal Victoria Hospital, Bahawalpur.

Dr. Asia Aziz
Bahawal Victoria Hospital, Bahawalpur.

ABSTRACT

OBJECTIVES: The purpose of this study was to assess the common and rare causes and predisposing factors of transverse lie at term. **SETTING:** Department of Obstetrics and Gynaecology Nishtar Hospital, Multan. **PERIOD:** February 1995 to April, 1996. **MATERIALS AND METHODS:** Total 5783 pregnancies were studied. Thirty cases of transverse lie were detected. Inclusion criteria for study were singleton pregnancy with maternal age between 15 to 40 years. **RESULTS:** In 66.6% cases no cause for transverse lie was found. In primiparas predisposing factors were found in 75% cases. In multiparous women predisposing factors were found in 26.9% cases; while in grand multiparas (Para>5) these were found much less commonly i.e. in only 10% cases. **CONCLUSION:** Etiology of transverse lie in the majority of cases is unknown. Grand multiparity is an avoidable predisposing factor.

INTRODUCTION

When the long axis of fetus lies perpendicular to the long axis of uterus, the condition is termed as transverse lie.

An incidence of one in 323 has been reported by Cruikshank & White (1973). Transverse lie carries a high rate of complications in labour[9] due to mechanical difficulties that occur during labour and also from factors causing this malpresentation. Early rupture of membranes, obstructed labour, uterine rupture[4] and the need for operative intervention increases the risk of maternal morbidity and mortality. There is increased fetal morbidity and mortality from early rupture of membranes and from trauma of manipulative delivery and hypoxia due to obstructed labour and cord prolapse.

Fetal mortality with transverse lie is 28% with vaginal and 7.2% with abdominal delivery[6]. Sood and Rajourkark (1990) quoted a perinatal mortality of 7.1% with abdominal delivery.

The study was aimed to assess the common and rare causes and the predisposing factors of transverse lie.

MATERIALS AND METHODS

The study was conducted from February 1995 to April 1996 at Nishtar Hospital Multan. Out of total 5783 pregnancies registered, 30 cases with transverse lie were detected. Inclusion criteria for study patients were singleton pregnancy; with maternal age between 15 to 40 years. When unbooked cases were received in emergency, routine history was taken and vital signs i.e. pulse, blood pressure and respiration were recorded. When the patient's condition was stable, thorough history i.e. medical, obstetrical and gynaecological was taken. Thorough general physical examination was performed alongwith systemic examination. For obstetrical examination, leopold maneuver was performed and transverse lie was diagnosed. Vaginal examination was performed where indicated. Transverse lie was confirmed by ultrasonography and other causes of transverse lie i.e. placenta praevia, lower uterine segment myoma etc. were also detected on ultrasonography.

RESULTS

Out of total 5783 pregnancies, only 30 patients were detected as transverse lie, which gives frequency of approximately 0.5%. Six(20%) were booked cases, remaining 24(80%) were admitted through emergency. Nineteen patients (63.3%) out of 30 were between 30-40 years and 8(26.7%) between 20-30 years as shown in table-I.

Table I. Incidence of transverse lie according to age.

Age	No. of Cases	%age
15-20 years	03	10.0
21-30 years	08	26.7
31-40 years	19	63.3

Sixteen out of 30 patients were para 2-5, 10 patients were grand multiparas (Para>5) and 4 were primiparas as shown in Table II.

Table II. Incidence of transverse lie according to parity.

Parity	No. of Cases	%age
Primipara	04	13.3
Para 2-5	16	53.3
Grand Multipara (Para>5)	10	33.3

In 20 cases (66.7%) no predisposing factor was detected. In 5 cases (16.7%) placenta praevia was the cause of transverse lie and in 2 cases (6.7%) lower segment uterine myoma was the cause. Certain predisposing factors related to transverse lie and their distribution according to parity is shown in table III.

Table III. Distribution of predisposing factors according to parity.

Predisposing factor	Parity			
	Primipara	Para 2-5	Grand Multipara	Total
Placenta Praevia	2	2	1	5
Lower segment uterine myoma	-	2	-	2
Uterine Anomaly	1	-	-	1
Anencephalic fetus	-	1	-	1
Cephalopelvic disproportion (CPD)	-	1	-	1
No Predisposing factor detected	1	10	9	20
Total	4	16	10	30

Out of 30, 21 cases presented as neglected transverse lie; 7 were with hand prolapse and 4 with cord prolapse. Nine cases presented with ruptured membranes and sepsis and one with ruptured uterus, as given in table IV.

Table IV. Distribution of complications n=30.

Complications	No. of Cases	%age
Hand Prolapse	07	23.3
Cord Prolapse	04	13.3
Ruptured membranes with sepsis	09	30.0
Ruptured uterus	01	3.3

DISCUSSION

Though the definite cause for transverse lie is usually difficult to assign, but any factor predisposing to malpresentation may be operative in the aetiology of transverse lie. The association between transverse lie and placenta praevia, polyhydramnias, uterine anomalies should be given particular consideration, while contracted pelvis and fetal anomalies are rare causes. Amongst these predisposing factors the most common causative factor is high parity with lax abdominal wall musculature[1].

In this study, the results suggest that in 20 cases (66.6%), no cause for transverse lie was found. Hibbard is of the view that in many cases no specific factor can be detected. In primiparas predisposing factors were found in 3 out of 4 (75%) cases, while in multiparous women predisposing factors were found in 7 out of 26(26.9%) cases. In grand multiparas (Para>5) the predisposing factor was found in only 1 out of 10(10%) cases, while in para 2-5 it was found in 6 out of 16 (37.5%) cases. Gemer and Segal (1994) observed that predisposing factors in case of primiparas can be detected in 66% of cases whereas in only 33% of multiparous women.

In this study placenta praevia was found as a predisposing factor in 5 out of 30 (16.7%) cases. Hall and O'Brien (1961) reported that placenta praevia is predisposing factor for transverse lie in 10% cases.

Uterine anomaly was found in one (3.3%) case. Stein and March (1990) studied that the incidence of transverse lie in pregnancies in women with mullerian duct anomaly was (11%).

As compared to primipara, the multiparity is clearly an important factor in predisposition of transverse lie[3]. This study suggests that in grand multiparas, the predisposing factors are much less commonly found than para 2-5 or primipara; hence indicating that grand multiparity itself is an important predisposing factor for transverse lie.

CONCLUSION

The predisposing factors in the majority of cases are unknown. Grand multiparity seems to be an important avoidable factor. Unavoidable factors like placenta praevia, lower segment uterine myoma could be carefully searched for the cause of transverse lie[8] and diagnosed well in time and managed properly.

REFERENCES

1. Cruikshank D.P. Malpresentation and umbilicals cord complications. In: Scot JB, Disais PJ, Hammond CB and Spellacy WN (Eds). Danforth's obstetrics and Gynaecology, 7th ed. Philadelphia, JB Lippincott Company 1994;514.

2. Cruikshank D.P. and White CA. Obstetric malpresentation: 20 years experience. Am.J Obstet Gynaecol 1973; 116:1097-104.

3. Evaldson GR. The grand multipara in modern obstetrics. Gynaecol Obstet Invest 1990; 30(4):217-23.

4. Gemer-O; Kopmar-A; Sasoon-E; Segal-S. Neglected Transverse lie with uterine rupture. Arch-Gynaecol-Obstet. 1993; 252(3):159-60.

5. Gemer-O and Segal S. Incidence and contribution of predisposing factors in transverse lie presentation. Int. J Gynaecol Obstet 1994;44(3):219-21.

6. Hall S.C. and O'Brien F.B. Review of transverse lie at the Methodist Hospital Brooklyn, AmJ Obstet Gynaecol 1961; 82:1180-85.

7. Hibbard MB. Principles of obstet. Transverse lie 2nd ed. London, Buter worth's international 1988;577.

8. Lau-WC; Fung-HY; Lau-TK; To-KF. A benign polypoid adenomyoma: an unusual cause of persistent fetal transverse lie. Eur-J-Obstet-Gynecol-Reprod-Biol. 1997 Jul; 74(1):23-5.

9. Seffah JD. Maternal and Perinatal mortality and morbidity associated with transverse lie. Int-J-Gynaecol-Obstet 1999 Apr; 65(1):11-5.

10. Sood M and Rajourkark KB. Perinatal mortality and morbidity in caesarean section. J Indian Mod Assoc. 1990;88(1):6-8.

11. Stein AL and March CM. Pregnancy outcome in women with mullerian duct anomalies, J Repord Med 1990;35(4):411-14.