PLACE OF INTERNAL PODALIC VERSION IN MODERN OBSTETRICS

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Introduction

Till the advent of 19th century internal podalic version was resorted to when immediate delivery of the foetus was necessary and for every conceivable form of dystocia. Internal podalic version till last century was the sheet anchor of an obstetrician when faced with an obstetric difficulty. An obstetrician of those days felt secure with a leg of the foetus in his hands! The procedure of internal podalic version was a boon especially when maternal mortality following abdominal delivery was formidably high. But methods, like human beings, grow old, become decrepit and die. The safety ensured to both mother and foetus as a result of abdominal mode of delivery has practically replaced internal podalic version from modern obstetrics. The incidence of internal podalic version is falling to a low ebb in all big obstetric centres of the world. The fall of internal podalic version, as a means of delivery, from its high pedestal of glory is due to higher incidence of cervical tears, uterine rupture and high foetal mortality.

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Increased safety of anaesthesia, blood transfusion and availability of potent antibiotic drugs have resulted in increased safety of caesarean section even when performed late in labour and has considerably limited the scope of internal podalic version.

It is our impression that the procedure of internal podalic version is fast receding into the background. A resident of today gets very few opportunities to see even the operation of internal podalic version, much less does he get an opportunity to do it himself. From the current trends of obstetric practice, it appears that this operation may become of historical interest only.

Very few articles have appeared in recent years on internal podalic version. The outstanding ones are by Keetel et al (1952), Townbridge (1950), Apthrop (1950), Amigo (1952), etc. No article is published discussing the status of internal podalic version in countries where slightly different conditions prevail. It is our endeavour to evaluate the true status of internal podalic version in modern obstetrics.

Material and Methods

This is a critical analysis of 200 cases of internal podalic versions

performed at Nowrosjee Wadia Maternity Hospital, Bombay, between 1954 and 1959, i.e. 6 years. Internal podalic versions performed in the same hospital between 1933 and 1939 are also compared when records were available. Incidentally the period of 1933-1939 falls before the advent of antibiotics.

The cases are analysed in relation to age, parity, degree of cervical dilatation, maternal mortality and morbidity and foetal loss. Interesting cases of internal podalic version are discussed and criticised when necessary.

Analysis

Table I shows that incidence of internal podalic version has fallen from 0.52% in 1933-39 to 0.32% between 1954 and 1959. Keetel et al mention 1% incidence at Iowa City Hospital between 1926 and 1940, whereas the incidence between 1941 and 1950 fell to 0.1%. Krishna Menon quotes an incidence of 1.2% between 1934 and 1938 and 0.6% between 1953 and 1957 at Madras Medical College. This shows an overall fall of internal podalic versions in most of the centres. Two hundred cases of internal podalic version in six years may appear a very high figure to some. It must be explained that Nowrosjee Wadia Maternity Hospital is situated in a labour area and unregistered and neglected cases from out of the way

TABLE I

Incidence of Internal Podalic Versions (1954-1959, 6 years)

Year	Total confinements	Internal pod. ver.		Forceps		Caesarean	
		No.	%	No.	%	No.	%
1954	8,872	25	0.28	104	1.17	97	1.09
1955	8,970	33	0.36	121	1.34	103	1.14
1956	8,323	43	0.51	191	2.28	138	1.65
1957	9,363	19	0.20	128	1.36	155	1.65
1958	10,264	39	0.38	156	1.52	174	1.69
1959	9,839	44	0.44	170	1.74	193	1.96
Mean			0.52		1.34		1.31

TABLE I-A

Incidence of Internal Podalic Versions (1934-1939, 6 years)

Year	Total confinements	Internal pod. ver.		Forceps		Caesarean	
		No.	%	No.	%	No.	%
1934	4,653	31	0.68	39	0.83	21	0.45
1935	4,654	18	0.38	60	1.28	26	0.55
1936	4,728	28	0.59	49	1.03	25	0.52
1937	5,070	17	0.35	88	1.73	21	0.41
1938	5,163	18	0.34	81	1.56	27	0.52
1939	5,211	17	0.32	62	1.18	25	0.47
Mean			0.44		1.26		0.49

TABLE I-A

Booked cases	85
Emergency cases	115
Total cases . ..	200

places are admitted in fair number when the foetal heart sounds have disappeared and there is an abnormal lie, mostly a transverse lie. Table I also draws attention to the rising incidence of caesarean section.

Table II analyses the internal podalic versions in relation to age and parity. Majority of the versions have been performed between the age group of 20-30 years and parity between III and V.

TABLE II

Incidence of Internal Podalic Versions in relation to Age and Parity

Age in years	Para					Total
	I	II	III-V	VI-IX	X +	
Upto 20	16	16	4	—	—	36
21 - 25	5	21	39	5	—	70
26 - 30	1	4	36	19	—	60
31 - 35	—	1	10	16	2	29
36 +	—	—	2	2	1	5
Total	22	42	91	42	3	200

TABLE III

Presentations

Vertex	18 cases
Transverse	181 cases
Thoracopagus	1 case
Total	200 cases

Table III mentions the presenting part at the time of admission. It is a common experience that correct diagnosis of presentation is difficult especially when patient is getting strong pains or has come late in labour. Keetel et al mention in their analysis that presentation was wrongly diagnosed in 70% of their cases. There were 22 cases of twin pregnancy.

TABLE IV

Duration of Gestation at the Time of Labour

28 weeks	34 cases
36 weeks	31 cases
Full-term	135 cases
Total	200 cases

Table IV shows the duration of gestation. One-third of these cases were premature. Abnormal lie is a common occurrence in the earlier weeks of gestation. It is possible that these 65 cases may not have a transverse lie if they had gone to full term.

TABLE V

Associated Obstetrical Complications

Hand prolapse	95 cases
Cord prolapse alone ..	13 cases
Hand + cord prolapse ..	39 cases
Compound presentation ..	6 cases
Placenta praevia ..	18 cases
Toxaemia of pregnancy ..	4 cases
Accidental haemorrhage ..	2 cases

Table V summarises the associated obstetrical complications.

Table VI enumerates the obstetric manouvres unsuccessfully tried be-

TABLE VI

Obstetrical Manoeuvres Unsuccessfully Tried before Internal Podalic Version

External version	31 cases
Replacement of cord loops	4 cases
Craniotomy and cephalotripsy	1 case
Craniotomy alone ..	1 case
Rotation of face with Leffs' forceps	1 case
Manual rotation of head ..	1 case
Willet's forceps	1 case
Internal podalic version tried by general practitioner outside	1 case
Replacement of prolapsed arm failed outside	1 case

fore internal podalic version was attempted. External version was tried in 31 cases and failed. This does not mean that external version always failed at this hospital. The cases where external version succeeded may have delivered normally and so no record of success of external version may be available.

Craniotomy was performed on one case. It was a case of compound presentation (head + hand) with absent foetal heart sounds and three-fourths dilated cervix. The head could not be delivered even after craniotomy. So internal podalic version was performed and a female baby, weight 5 lb. 2 oz., was extracted.

Craniotomy and cephalotripsy were performed on one case. She was a 3rd para, full-term, with vertex I floating and absent foetal heart sounds; cervix was 3 fingers' dilated and membranes had ruptured. There was a cord prolapse and marked disproportion at the brim; craniotomy was performed. As there was no progress for 3 hours after perforation, base of the skull was crushed with cranioclast. In spite of the crushing of the base of the skull the baby did not deliver, possibly because crushing was not properly done. So internal podalic version was performed with some difficulty and a male baby, stillborn weighing 8 lbs., was delivered. Self-retaining catheter was kept for 72 hours. Patient developed a vesico-vaginal fistula on the 5th day. The fistula was repaired after 6 months and she delivered a full-term baby by caesarean section 2 years later.

In two cases the rotation of the head was successful but during the rotation the head receded and became absolutely floating. It was thought that high forceps will be dangerous so internal podalic version was carried out. The baby on whom Leff's forceps rotation was done was still-born whereas the baby on whom manual rotation was done was living and well.

Table VII summarises the outcome of the foetus in relation to dilatation of cervix and duration of gestation. It is seen that internal podalic version was resorted to earlier when babies were premature than when the babies were full-term. Moreover premature babies were mostly extracted soon after version, whereas in full-term babies only the leg was pulled out and kept under traction till cervix dilated fully. Moreover, the foetal survival increases with the dilatation of cervix, i.e., more full-term babies were salvaged, when cervix was fully dilated (72%) than when servix was only 1/4 dilated (12½%).

TABLE VII

Foetal Outcome in relation to Dilatation of Cervix at the Time of Version (100 babies were alive at the time of version)

	Full-term	36 weeks	28 weeks	Total cases
Full dilatation	58	8	1	67
Living	42 (72%)	4	—	
S.B.	14	3	—	
L.D.	2	1	1	
3/4 dilatation	11	4	1	16
Living	3 (27%)	1	—	
S.B.	7	3	1	
L.D.	1	—	—	
1/2 dilatation	3	—	—	3
Living	—	—	—	
S.B.	3	—	—	
L.D.	—	—	—	
1/4 dilatation	8	1	5	14
Living	1 (12.5%)	—	—	
S.B.	6	1	5	
L.D.	1	—	—	
				100

S.B. = Still birth. L.D. = Living but died.

TABLE VIII

Baby Weights

	Cases	Total living born	Living no discharge
Less than 2½ lbs.	10	—	—
lb. oz. lb. oz.			
2 - 8 to 3 - 7	32	6	2
3 - 8 to 4 - 7	35	11	10
4 - 8 to 5 - 7	47	21	20
5 - 8 to 6 - 7	41	19	16
6 - 8 and over	11	3	3
No weight record available	25	—	—
Total	200		

TABLE IX

Foetal Outcome

Still-born	137 (uncorrected)
Asphyxiated and died ..	12
Living	51
Total ..	200

Condition of F.H.S. on Admission

Foetal Heart sounds present	100 cases
Foetal Heart sounds absent	100 cases
Total ..	200 cases

Out of 100 babies with F.H.S. present, 51 babies survived and 49 babies died.

Table VIII gives the foetal outcome in relation to the baby weights. More babies in the 4½-6½ lbs., weight group were salvaged. As seen from the Table IX, foetal heart sounds were absent in 100 babies at the time of admision. That means 100 babies were expected to survive before internal podalic version was attempted. Out of these 100, 51 babies were

salvaged that means corrected foetal survival rate is 51%.

TABLE X
Maternal Complications

		No. of cases
Cervical tear		5
Rupture uterus		2
Treated with pack	1	
Explored and sutured	1	
Post-partum haemorrhage		13
Manual removal of placenta		31
Blood-stained urine for 1-2 days		1
Fever — 99°-103° F.		11
Deaths		2
(Pulmonary embolism — 8 th day Afibrinogenemia, collapse)		
Exploration of uterus in 39 cases		

Table X enumerates the maternal complications which occurred in this series.

There were 5 cervical tears. In one of these cases, there was difficulty in bringing down a leg and the tear in the cervix was seen posteriorly and to the left. The tear was sutured. As there was some oozing, the vagina was packed. Patient was given 2 blood transfusions. Uterus was well contracted. In another case Leff's forceps rotation was tried before version. It is difficult to say whether the cervical tear was due to Leff's forceps or due to version. It is more likely to be the result of forceps. The remaining three cases had small cervical tears that were sutured.

There were two cases of rupture uterus. Fortunately, both survived to tell the tale.

1st case. A 30 years old, III para, was admitted with 28 weeks' gestation and labour pains. On examination, uterus was felt just above the umbilicus. It was transverse lie (right dorsoanterior). Foetal heart sounds were heard. On vaginal examination, cervix was 2 fingers' dilated, being taken up, membranes were absent and hand and the chest wall were felt. Pelvis was normal. (An attempt at external version and a bipolar version failed.) Patient was observed for 3½ hours and when cervix was 3 fingers loose, internal podalic version was easily done and a female baby, stillborn, weight 2 lbs. 14 ozs., was delivered. Patient had a slow trickle of blood per vaginam and the uterus was well contracted. Patient was given a blood transfusion but as she got rigors, it was discontinued. The patient collapsed 6 hours later. The uterus was now explored without anaesthesia which showed rupture on the right side of the lower segment. The condition of the patient was very low for exploration per abdomen and so the uterus was packed. She was given six blood transfusions and one bottle of plasma. The pack was removed after 12 hours. The patient survived, but developed listless behaviour, refused to eat and a complete loss of interest in life. For this she was transferred to medical side.

2nd case. A second para, age 20 years, was admitted with full-term pregnancy and labour pains. On abdominal examination, presentation could not be made out hence it was labelled as? vertex, ? breech. Foetal heart sounds were absent. The membranes ruptured 7 hours after admission. Vaginal examination after rupture of membranes revealed fully dilated cervix and a hand prolapse. There was shoulder presentation. She was taken up for internal podalic version under anaesthesia but the version could not be done. Decapitation was done and baby delivered. On exploration of the uterus a small rent in the fornix, extending into the lower segment was diagnosed. Laparotomy was performed and the rent in the lower segment sutured. Patient was discharged on 10th post-operative day. Baby weighed 3 lbs. 10 ozs.

One case developed vesico-vaginal fistula after failed craniotomy and cephalotripsy. The internal podalic

version was then performed. The case has been described in detail previously.

There were two maternal deaths but none of them could be attributed even remotely to the manoeuvre of internal podalic version. One case died 6 hours after internal podalic version due to afibrinogenaemia and the other one suddenly collapsed on the 8th day and the cause of death was given as pulmonary embolism.

TABLE XI

Outcome of Version for Babies with Cord Prolapse

Cord prolapse with pulsations present	30 cases
Cord prolapse with pulsations absent	22 cases
Out of 30 cases with cord pulsations present 12 babies lived after version and 18 babies lost.	

TABLE XII

Foetal Outcome in Second of Twins

2nd twin living	9 cases
2nd twin still-born	10 cases
2nd twin asphyxiated and died	2 cases
Thoracophagus	1 case
Total	22 cases

Table XI shows the outcome of internal podalic version with cord prolapse. Table XII shows the foetal outcome in the second of the twins. There were 22 sets of twins out of which 10 babies survived.

Table XIII summarises the foetal complications in cases of internal podalic version. Fracture skull appears to be as a result of failed forceps before version was attempted. The table also shows other associated congenital anomalies in the foetus.

TABLE XIII

Foetal Complications due to Internal Podalic Version and Other Congenital Anomalies

Fracture femur ..	1 case	all living
Fracture skull ..	2 cases	all living
Exomphalos	2 cases	
Hydrocephalus with spina bifida, talepes ..	1 case	
Thoracopagus ..	1 case	
Spina bifida alone ..	1 case	
Anencephalus ..	1 case	

TABLE XIV

Difficulties during Version

1. Difficulty in pulling down the leg	21 cases
2. Difficulty in after-coming head	20 cases

TABLE XIV-A

Management of Cases with Difficulty in After-coming Head

1. Craniotomy: Tried 8 cases. Suceeded in ..	7 cases
2. Forceps: Tried 9 cases. Succeeded in ..	5 cases
3. Manual rotation of occipito-posterior	2 cases
4. Traction on the after-coming head	7 cases

Table XIV reveals the difficulties encountered during internal podalic version. When there was difficulty in pulling down the leg, the back was anterior and the limbs were posterior.

Table XIV-A summarises how the cases of difficulty in extracting the after-coming head were managed.

In this series of 200 cases internal podalic version failed in 3 cases. These cases were managed by embryotomy in two cases and decapitation in one case. Open ether anaesthesia was administered in 198 cases, saddle-block in one case and no anaesthesia in 1 case. The case

where internal podalic version was done without anaesthesia was the case of 2nd of the twins.

Discussion

The art of internal podalic version is being slowly lost today in favour of the scalpel which has become much easier to wield.

The present trend in obstetric practice all over the world is away from, rather than towards, a more general employment of internal podalic version. The procedure, once the final answer to all obstetric difficulties during labour, is now regarded as a difficult and dangerous procedure only to be undertaken in the most desperate emergencies.

Joseph DeLee, in 1915 edition of his text-book, remarks: "Few operations are so satisfactory as version but none is more dangerous if performed without due considerations of the conditions."

Last edition of Herman's difficult labour devotes an entire chapter to internal version. He writes: "It may be laid down as a precept in difficult labour—when in doubt, turn. But the cases in which you turn because you are in doubt ought to be rare."

All operations, however minor they may be, are potentially dangerous if proper care is not taken. Success of every operation depends more on the skill of the operator and his familiarity with the procedure.

The following are the conditions for which internal podalic version has been performed:—

(1) Shoulder presentation. (2) Unfavourable cephalic presentations, viz. persistent mentoposterior and persistent brow presentation or persistent occipitoposterior or occipitotransverse presentation. (3) Prolapse of the umbilical cord when cervix is completely dilated or dilatable—presenting part is high. (4) Compound presentation or cord prolapse in the second of the twins. (5) Uterine inertia. (6) Placenta praevia. (7) Prophylactic podalic version of Potter. Potter advised internal podalic version in all cephalic presentations to shorten the second stage of labour and to diminish the pains in the second stage of labour. Obstetricians are not in agreement with Potter's views. In Potter's hands, the procedure has not increased maternal or foetal mortality.

Internal version in cases of placenta praevia is also not devoid of risk because the lower segment is friable and may tear. External podalic version and then pulling down of the leg is preferable if the baby is premature or dead.

Mauriceau described the requisite qualities of the operator who wants to perform an internal podalic version. "The operator must be healthful, robust and strong because this is the most laborious of all the operations of chirurgery, for it will make one sometimes sweat so that he shall not have a dry thread, though it was the coldest day in winter. He must have small hands with long fingers for their easier introduction in the womb."

The ideal conditions for performing the operation of internal podalic version are:—

1. Fully dilated or dilatable cervix.
2. Presence of sufficient liquor amnii.

3. Uterus that is not tonically contracted but a uterus that can relax.
4. There should not be any cephalo-pelvic disproportion.

The dilatation of the cervix requires some comments. It is a common experience that the cervix, which appears fully dilated when membranes are tense and bulging, becomes less so as soon as the membranes rupture. The cervix that grips the after-coming head is the most annoying feature when extraction of the baby is almost completed except for the head. The dilatation and dilatibility of the cervix must be carefully gauged before performing version. The cervix must be sufficiently dilated to allow of the passage of the operator's hand without gripping it. It is desirable to have a fully dilated or almost fully dilated cervix. In the present series, internal podalic version was performed in some cases though the cervix was not fully dilated. The breech extraction was not carried out immediately when cervix was not fully dilated, but steady traction was applied to the leg. How long to wait for cervical dilatation before proceeding with internal podalic version is a moot point in obstetric practice. There is no final answer available to this difficult question. As Shears puts it, "To wait for complete cervical dilatation would be to wait until both mother and the child succumbed". He believed that when version is indicated, dilatation of cervix is indicated and should be performed. But this was way back in 1917 when caesarean section had not touched the heights of safety as in the present days. It is a clinical observation that cervix always dilates a little more when patient is under anaesthesia. It is a good rule to wait for complete cervical dilatation if feasible—when baby is full-term and is living. In cases of premature babies when foetal heart has stopped, version should be performed as soon as the cervical dilatation is sufficient to admit the operator's hand.

In the present series, some internal podalic versions have been performed after failed craniotomy. It is debatable whether internal podalic version has any place after failed craniotomy, more so after failed cephalotripsy. The idea of doing version on such a case appears frightening as one contemplates the consequences that may arise to the soft tissues of the mother's genital tract from the sharp spicules of bone, projecting from imperfectly crushed head. This case did develop vesico-vaginal fistula, so it appears that it is wrong obstetric judgment. Either it could have been taken up for caesarean section straight away or for internal podalic version and then for craniotomy. Fistulae following obstetrical manoeuvres bespeak of poor obstetric judgment and remind us of obstetrics of bygone days.

The cases of podalic version on failed forceps require some comment. It is observed that during manual or forceps rotations of the head, sometimes the head recedes and becomes floating. This is more common when general anaesthesia is given. Once the head has become floating, there are two alternatives. One is to perform caesarean section and the other is to perform internal podalic version. Application of forceps to a floating head is universally condemn-

ed except in selected cases of second of the twins. Forceps can be tried only if the head can be brought down upto the level of the ischial spines.

The operation of internal podalic version was performed essentially in the interest of the mother. The foetal survival was of secondary importance. Internal podalic version is associated with high foetal mortality. In the present series corrected foetal mortality is 50%. Today the unborn child merits as much attention as the mother and an effort to give her a live baby to take home has improved the foetal salvage by elimination of traumatic vaginal deliveries.

The reason why internal podalic version is having evil reputation is because of the danger of rupture of the uterus. It is advisable to explore the uterine cavity after every operation of internal podalic version. It is said that only 39 cases were explored in the series of 200 cases. There is no doubt that if the case of rupture uterus (described above) was explored soon after version the rupture of the uterus would not have been missed. As the patient is already under anaesthesia, exploration of the uterus is not likely to cause shock.

Internal podalic version in second of the twins is relatively a simple and a safer procedure because baby is usually small, maternal passage is roomy and usually there is sufficient liquor. The cervix is already dilated and the first baby has made the way clear for the other one. The foetal survival rate should be higher in the second of the twins for the same reasons. In the present series 9 babies were sent home alive out of 22 sets of twins on whom version was performed. In the present series the foetal survival is not higher in the second of the twins. Internal podalic version in cases of the second of the twins has a place in following conditions: (1) transverse lie, (2) cord prolapse and (3) compound presentation. As the passage is prepared by the first of the twins, internal podalic version appears to be a quicker method to procure a live baby because extraction can be carried out at the same time. Compound presentation in a single foetus is not an accepted indication of internal version; compound presentation in second of the twins may be subjected to internal version.

The cervix gripping the after-coming head is an annoying feature to the obstetrician. If the baby is already dead it does not cause much worrry but if the foetal heart is still present, obstetrician is likely to be more restless and energetic in procuring quick delivery of the after-coming head. All temptation to drag the head out with force must be curbed as severe damage may result to the mother's soft parts from the procedure. Forceful extraction of the after-coming head through incompletely dilated cervix may be responsible for the causation of genital prolapse later. The pulling through incompletely dilated cervix may cause sufficient stretching of the ligaments already put on maximum physiological stretch. Pulling the head through incompletely dilated cervix as a cause of genital prolapse has not been emphasized in text-books of gynaecology. Ideal treatment in such cases would be to allow the baby to hang by its own weight and

the delivery should be spontaneous after some time.

Rupture of the uterus is a sufficiently grave complication to deter an obstetrician from the use of internal podalic version when the conditions are not satisfied. It should never be performed late in second stage of labour when lower segment is very much stretched or the liquor is scanty—uterus is tonically contracted; such are the cases who have given bad name to this very fine procedure of internal podalic version.

Munro-Kerr states: "I cannot overemphasise the dangers of internal podalic version performed late in labour." Every word is in italics. Greenhill states: "In such circumstances (late labour) it is an operation that should be outlawed."

Any operative procedure performed when not indicated is bound to cause some catastrophy. That bespreaks of obstetric misadventure with poor judgment, but should in no way minimise the importance of the procedure.

While doing the version, patient must be anaesthetised, so that there is good relaxation of abdominal muscles, gentleness in all manoeuvres is the key to success. Force and jerky movements should be avoided at all costs. If success does not come, say within 5 minutes, the procedure should not be persisted for long. Even if one may succeed after 15-20 minutes, it is not advisable to keep the hand in the uterine cavity for such a long time. The obstetrician should realise the limitation and change the line of treatment, either a decapitation or caesarean section.

Looking to the safety of caesarean section to both mother and child, internal podalic version may not be performed as frequently as it was done in the past. But this does not hold true for places where there are not enough facilities. India is a country where villages abound and one hospital may serve a wide area. Cases do come where judicious use of internal podalic version may help and solve many obstetrical problems.

Even in present day obstetrics, following indications are worth a trial of internal podalic version. Of course other conditions must be satisfied and in no case should it be performed when there is scanty liquor, tonically contracted uterus or a stretched lower segment.

(1) Transverse lie and absent foetal heart sounds and cervix half or more dilated.

(2) Transverse lie with full dilatation of cervix and a live baby with no cephalo-pelvic disproportion as an alternative to caesarean section.

(3) Vertex presentation with cord prolapse, head floating in a third or fifth para, a fully dilated cervix—again as an alternative to caesarean section.

(4) Cord prolapse in the second of twins with a transverse lie or vertex presentation.

(5) Compound presentation in second of twins when replacement does not succeed and spontaneous delivery does not occur in 15-30 minutes.

(6) Failure of manual rotation of head or if the head recedes during rotation and becomes floating, internal version may be chosen as an alternative to caesarean section.

Summary and Conclusions

(1) Analysis of 200 cases of in-

ternal podalic versions performed at Nowrosjee Wadia Maternity Hospital, between 1954 and 1959, is presented in relation to age, parity, dilatation of cervix, etc.

(2) Foetal salvage in single foetus and in the second of twins is briefly discussed.

(3) Complications of internal podalic version are narrated at length and cases presented in detail. There were two cases of ruptured uterus.

(4) Indications for internal podalic version in modern obstetrics are briefly enumerated.

(5) The more fully the cervix is dilated, the greater is the success rate and foetal salvage.

(6) The cervical dilatation becomes less after rupture of the membranes.

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