

COMPLETE PERINEAL TEARS: PREVALENCE, ETIOLOGY AND OUTCOME AFTER TREATMENT

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SUMMARY

31 patients with complete perineal tears were studied for the incidence, etiology and outcome after treatment, in one year period. Out of the total 31 patients, 28 patients were admitted with already established tears, after delivering some where else, while 3 patients sustained tears during delivery in this hospital. The contributory factors include prolonged labour, primigravidity, malpresentations particularly breech presentation, malpositions such as occipito-posterior position, big baby, unattended delivery and mismanagement of labour by traditional birth attendants. Instrumental delivery and extension of episiotomy were also amongst the contributory factors. All the tears were repaired surgically and patients were followed up for upto 8 weeks postoperatively. 94% of the patients had functional anal sphincters and hence successful repairs at the 8 weeks follow up visits.

INTRODUCTION

Complete perineal tears (3rd and 4th degree perineal tears) are one which involve the vaginal mucosa, perineal muscles and anal sphincter and rectal mucosa.^{1,2,3} Complete perineal tears have been known since antiquity.^{4,5} One was found in an ancient Egyptian mummy, Hensheint of the court of Mentuhoptem, dated about 2050 B.C. The initial data available records that in mid 1700 patients with complete perineal tears were kept at absolute bed rest, with their legs strapped together for at least 6 weeks.⁴ Today several less drastic measures have evolved. Of historic interest is the Warren's flop technique, which was prescribed in the pre-antibiotic era, more than 150 years ago.⁶ The main advantage of this technique was that it completely separated the fecal stream from the repaired anal sphincter. Now a days with excellent antibiotics and adequate pre-operative bowel preparation, Warren's technique is not recommended. Instead the layer technique is the method of choice.⁷

The purpose of this study is to find out the prevalence, etiological and contributory factors in the occurrence of 3rd and 4th degree perineal tears, the outcome after surgical repairs of these tears and the steps one could take to prevent them.

MATERIAL AND METHODS

The study was carried out in Obstetrics and Gynaecology "B" Unit, Postgraduate Medical Institute Lady Reading Hospital Peshawar, from February 1, 1992 to January 31st, 1993. Total number of deliveries during this one year period was 2896; out of which 3 patients sustained either 3rd or 4th degree perineal tears, while 28 patients were admitted with already established tears after delivering somewhere else. Cases of various ages and parity were included. Most of the admissions were done from the out patients department where the patients were referred either as self referrals or from other private clinics or District Hospitals. Majority of the patients were uneducated

TABLE-1
CONTRIBUTORY FACTORS FOR COMPLETE PERINEAL TEARS.

| CAUSES | NUMBER | PERCENTAGE |
|-----------------------------------|--------|------------|
| 1. Prolonged Labour | 20 | 64.5% |
| 2. Breech Presentation | 8 | 25.8% |
| 3. Instrumental Delivery | 3 | 9.3% |
| 4. Macrosomic Baby | 8 | 25.8% |
| 5. Delivery in Lithotomy Position | 8 | 25.8% |
| 6. Extension of Episiotomy | 3 | 9.3% |

More than one factor was present in the same patient.

and of low socio-economic status. Most of the patients gave the history of prolonged labour and the presenting complain was postpartum haemorrhage in 25% of the patients and incontinence of faeces and flatus and pain at the perineal area in 75% of the patients. The tears were diagnosed on history and physical examination of the patients. 51% of the patients had 3rd degree tears, 40% had 4th degree tears and 9% had recto-vaginal fistulas with intact sphincters. The patients were grouped into 3 groups according to the duration of tears. Group I consisted of patients with fresh tears i.e. from immediately after delivery for upto 24 hours post partum. Group II consisted of patients whose tears were 72 hours old and there was superimposed infection in the tear as well. Group III, consisted of patients with old tears of 1 to 6 weeks duration after delivery.

The patients in group I were all admitted as emergencies. They had minimal bowel preparation. Those in group II were admitted for pre operative bowel preparation and antibiotic cover before surgery, for at least 3-5 days before operation. They were given daily cleansing enemas and metronidazole tablets. The diet was kept semisolid or liquid. Any other broad spectrum antibiotic providing cover against

both gram positive and gram negative organisms was also prescribed.

The patients in group III were advised to wait for about 3 months post partum and then to come for repair of the tears. The surgical technique used for the repair of the tears was "layer technique" in which the three important structures i.e. perineal body, rectovaginal septum and external anal sphincters were repaired layer by layer using chromic catgut No. 2/0, chromic catgut No. 1 and black silk No. 1. Post operatively, pain relief was given along with antibiotics. Laxatives were given for 6 weeks post operatively. The patients were advised to have liquid diet for the first 2 days, semisolid diet from 3rd to 5th post operative day and later on solid diet.

RESULTS

60% of the patients were primigravidas and rest were multigravidas. 64.5% of the patients had cephalic presentations of the fetus at the time of delivery, 26% had breech deliveries and 9.5% had instrumental deliveries. More than 70% of the patients had home deliveries, either unattended or attended by birth attendants. Episiotomy was given in 50% of the patients. Majority of the patients delivered in dorsal position while the rest delivered

TABLE - II
MODE OF DELIVERY:

| MODE | NUMBER | PERCENTAGE |
|--|--------|------------|
| 1. Normal Vaginal Delivery without Episiotomy. | 14 | 45.1% |
| 2. Normal Vaginal Delivery with Episiotomy | 5 | 16.1% |
| 3. Breech Delivery | 8 | 25.8% |
| 4. Forceps Delivery | 2 | 6.1% |
| 5. Vacuum Extraction | 1 | 3.2% |

either in lithotomy position, squatting position or kneeling on all fours. Average hospital stay for majority of the patients was one week. Only 4 patients had postoperative complications (12%); 2 had immediate postoperative haemorrhage and 2 had rectovaginal fistulas as a result of failed repair. There was no patient death. 3 patients were lost to follow up while out of remaining 28 patients, 93% patients had successful repair and 2 patients had failed repair.

DISCUSSION

Only 3 patients, out of the total 31 patients included in this study, sustained tears in the hospital. The rest 28 patients were admitted either in emergency or through outpatients clinic. All of these patients had established tears after delivering elsewhere. The contributory factors include prolonged labour, macrosomic babies, malpositions and malpresentation primigravidity, mismanagement of labour and extension of episiotomy. A good deal of research work has been done on the role of episiotomy, whether it should be given routinely or only in cases of imminent tear of the perineum; whether it is protective or it contributes to the tear of the perineum.^{7,8,9,10,11,12,13} The commonly reported marker of severe pelvic trauma in the literature is the 3rd and 4th degree perineal tears. Various studies suggest that midline

episiotomy predisposes to perineal rupture, especially in nulliparus. In the west Berkshire perineal management trial, it was concluded that routine use of episiotomy does not prevent perineal trauma. However it may prevent stress incontinence and vaginal prolapse in long term.¹⁴ The position of women at the time of delivery may also be an important factor in causing perineal trauma. It has been observed that women who deliver in supported squatting position, such as on a birth Cushion, have a decreased incidence of perineal rupture as compared to those women who deliver in unsupported squatting position or in exaggerated lithotomy position. Instrumental delivery may also predispose towards perineal tears. In our study 2 patients sustained tears after forceps delivery and 1 after vacuum extraction. The suture material used to repair the perineal tears in our study were chromic Catgut 2/0, Chromic catgut 2 and Black silk 1. Post operatively, dietary advice, laxatives, antibiotics, metronidazole, pain relief and Sitz bath are given to all patients and with good results. Majority of the patients moved their bowels on 3rd or 4th post operative day.^{15,16,17} Anal manometry has been advised by many research workers both pre-operatively and post operatively at the time of follow-up. Both resting and squeeze pressures should be measured. Anal manometry using a multilumen continuously perfused catheter provides a quantitative assessment of

sphincter function and diffusion and should be an important part in the management of patients with faecal incontinence from obstetric injuries.¹¹ Prevention of the occurrence of 3rd and 4th degree perineal tears include presence of an attending physician at the time of delivery, prevention of precipitate labour, controlled delivery of fetal head and shoulders, a timely given generous episiotomy, early recognition of fetal risk factors such as macrosomia, malpositions, mal-presentations, all of which predispose to perineal rupture. Large doses of Oxytocin should be avoided because it may result in rapid labour with a greater chance of perineal damage. The following recommendation can help in improving maternal health and decreasing morbidity and mortality: Mass media should be widely utilized for public education programmes to increase the awareness and importance of maternal and fetal health, good nutrition and regular antenatal check ups. Traditional birth attendants, health visitors and other health personnels should be properly trained and refresher courses should be arranged by the health department for all the above mentioned personnels on regular basis. They should be specifically trained and made aware about good antenatal care, timely recognition of various maternal and fetal risk factors and timely referral of the patients to hospital. Conduct of safe normal delivery, asepsis and early detection of complications. It should be the aim that no delivery should be unattended, for this purpose an efficient ambulance service should be provided from doorstep of the patients to the hospitals.

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