Exstrophy of bladder is the most common anomaly of the lower urinary tract which consists of the bladder and urethra being open and their lining forming a part of the body surface. Fortunately it is rare, occurring in approximately 1 in 10,000 to 40,000 live births. Department of Paediatric Surgery at Nehru Hospital P.G.I. Chandigarh admitted 3-5 infants born with this defect in a year, mostly from the northern states of the country.

Birth of a child with any congenital deformity is a cause of great concern for parents and other family members, especially when the deformity is of a rare variety which normally one has not experienced in life, the situation demands a great attention from nursing personnel. In many remote villages and cities even days, midwives and Nurses are unable to provide the required care in such circumstances.

Birth history of the Child

Informant-Mother

A baby was born to a 26 year old primigravida mother in a village of Bihar. The delivery was conducted by a village dai at home. Mother informed that she heard the cry of the baby immediately after the birth, but dai could not distinguish the sex of the child. She informed that the child is born due to some curse in the family, and it needs some rituals to be performed. However the mother saw the child 2 hours after the birth and observed a sore on the abdomen. She was reportedly shocked to see this unusual wound on the abdomen. After 2 days she could see urine coming out of the wound, leaving the clothes of the child wet. She was worried and scared that it might be painful to touch and it will hurt when the child is covered with clothes, not knowing what to do the family remained apprehensive for seven days. Each and every member of the village came to have a glimpse of the baby and every one provided his own version about the child's problem. At last they decided to take the child to a city doctor, who was unable to provide any help to relieve the mental agony of the parents and family. When the child was 20 days old, he was taken to Patna Medical College and Hospital, where the doctor explained the condition to parents and suggested them to take the baby home and wait till the child attains 3-4 months of age, then he should be taken for surgery. During this time they were explained to cover the exposed mucosa with a vaseline glove and a frequent change of napkin to avoid irritation due to wet cloth to the bladder mucosa.

Family History of the Child:
The family comprised child's parents and grandparents, they had some land in the village and were cultivating it to earn the livelihood. They belonged to lower socio economic status and were illiterate.

Admission to P.G.I.: At approximately five months of age, the baby was admitted to Paediatric Surgery ward. On admission routine investigations were carried out. Parents were explained about the deformity and counselled by the nursing staff to relieve their anxiety.

Pre Operative Nursing Care:

Comfort measures for the child, provision of breast feed, assistance in routine investigations, psychological care of the parents, administration of prescribed medicines, care of the exposed bladder mucosa.

After six days of admission child was taken up for surgery. Primary closure of the bladder and bladder neck tightening was performed.

Intra operatively child was transfused 300 mL of blood. A suprapubic catheter was left in the bladder, two 5 ft. tubes were left in each ureter and 5 ft. tube was inserted in the urethra to drain urine.

Post Operative Nursing Care:

Intravenous antibiotics and Paediatric maintenance solutions were administered as prescribed. On second postoperative day oral sips were started, following which child developed vomiting and abdominal distension. Child was taken to operation theatre again and re-exploration was performed through laparotomy, reduction of the herniating bowel loops causing intestinal obstruction was done.

Following Nursing measures were carried out:

- Monitoring of vital signs
- Administration of intravenous fluids
- Nasogastric aspiration
- Recording of urinary output from all catheters
- Administration of medications
- Assisting surgical dressing
- Daily baby cleaning and sponging
- Steam inhalation by tent method
- Psychological support to parents
- Attending comfort measures of the child and emotional support

On 4th Post-Operative day, urethral catheter was removed.

11th day nasogastric tube was
removed
14th day left and right urethral catheters were removed
21st suprapubic bladder catheter was removed.

Child was discharged after suture removal and was advised to visit the follow up clinic after one month. Child was taking breast feed and was passing urine per urethra. Suture line was healthy at the time of discharge.

Discharge Teachings
To continue adequate oral fluid intake. Weaning foods to be started.
Prevention of infection.

FUTURE PLANS REHABILITATION
Parents were explained about further management of the child for contiveness of urine, epispadias repair and bladder augmentation at three years of age.

EXTROPHY OF BLADDER
Exstrophy of bladder is two and half times more frequent in boys than girls and is not familial. It is the result of altered, not embryogenesis. Exstrophy of bladder results when early rupture of membrane prevents mesodermal in growth and lower abdominal midline fusion. When the cloacal membrane ruptures, the anterior abdominal wall; pubis bladder and urethra fail to develop normally. The paired original tissues of penis or clitoris fail to fuse in the midline. The extent of exstrophy depends on size of cloacal membrane and its developmental stage at the time of rupture. Complete exstrophy is an extensive anomaly. The lower urinary tract i.e. the entire bladder to the external urethral meatus is exposed and may be without ventral covering. The defect in the male infant may be accompanied by a short broad spade like penis, epispadias, undescended testis or an inguinal hernia. The perineum is flatter and the anus is in more anterior position than normal. In the female infant the clitoris may be cleft. The labia widely separated and vagina located anteriorly in either sex the rectus muscles below the umbilicus are separated and pubic rami are not joined. The femoral heads are externally rotated so that when child begins to walk there is waddling gait.

The defect is obvious at birth, in complete extrophy of bladder the anterior bladder wall is absent and bright red posterior bladder lining is exposed. Urine seeps on the posterior bladder wall from abnormal urethral outlets. This causes a constant odour of urine and excoriation of bladder mucosa. Infection occurs, leading to progressive renal damage and ultimate renal failure. The nurse plays a major role in the care of the child and helps the parents in accepting the child with deformity and prepare them psychologically for treatment of the child, by ensuring better quality of life in terms of urine continent, as the child grows he develops urine incontinence. The child needs to be managed with intermittent urinary catheterisation at regular intervals by the parents, the child and parents need rehabilitation, guidance by paediatric surgeons, nurses and advice for continence management periodicaliy. Midwives, dais and nurses working in the peripheral centres need to be aware about this complex deformity and its immediate management after birth of the child. So that the parents can be counselled and referred to the health centres having facilities for management of such children at the earliest.

BIBLIOGRAPHY

ELECTION RESULT
TNAI AP STATE BRANCH
The following office bearers were declared elected at the AP State Branch Conference held during 16-17th Sept, 2001.
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