USTA 2000

University of Science & Technology Annual

UNIVERSITY OF SCIENCE & TECHNOLOGY, CHITTAGONG
BANGLADESH

A lately diagnosed case of Spinal Dysraphism having lost Sphincteric function presenting with Obstructive Uropathy

R. Karim, K. M. Burhanuddin*, Ashish K. Chowdhury, Hasan M., Mokhlesur R.

Spina bifida is common[1] and mostly an incidental finding during clinical evaluation of a patient when there is no involvement of spinal cord and peripheral nerves. But on the other spectrum of presentation where there is involvements of different degrees to the organs can present with dreaded complications resulting from them. Here we present a case of spina bifida of sacro-coccigeal region with obstructive uropathy

Keywords: Spina Bifida, Urinary Incontinence, Obstructive Uropathy

Case Summary

Mr. A.T., 35 years old male a rickshaw puller by profession hailing from Anwara, Chittagong was seen on 2nd August at BBMH-USTC with the complaints of bilateral loin pain for last one year. He has got the history of difficulty in evacuation of bowel and bladder with incontinence of urine since the period he remembers. He had also recurrent attacks of fever with rigor. He is marred and has got two

Picture : 1

Deapartment of Surgery, BBMH & USTC
* Correspondence: K.M.Burhanuddin, FRCS (Ed.), Associate Professor,Department of Surgery, BBMH & USTC

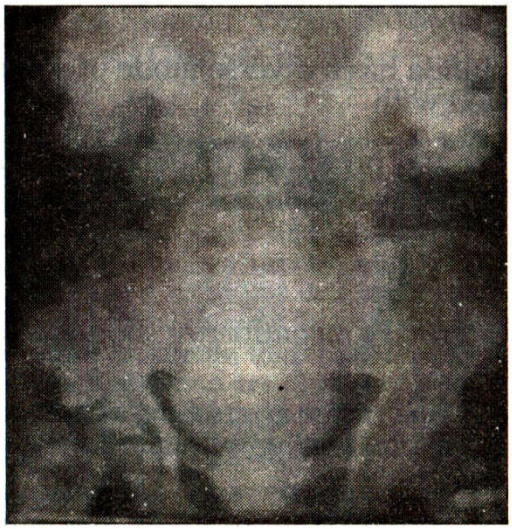
children. He had some surgery in the natal cleft during his childhood, the nature of which is unknown. On examination he was well built and well nourished. No features of uraemia or acidosis. Vital signs were normal. His external genetalias were found to be normal but a condom was seen to be placed over the penile shaft tied arround it at it's root containing a small quantity of urine inside.This idea was applied by him to prevent him from soiling which he was practicing since his childhood. (Picture: 1). On removing the condom a ring like scar mark of tier thread was found at root of the penis. External urinary meatus and distal urethra were normal. Urinary bladder was partially distended. Loins were full and slightly tender on deep palpation. There was a linear scar mark over the sacrum without any discharge or sinus opening. (Picture: 2)

Picture: 2

About the central and peripheral nervous system he had loss of sensation over the coccygeal area of perineum, pertaining to the S_4 segment Per-rectal digital examination revealed patulous anus and rectum was found to be loaded with faecal materials. Act of micturition showed no real stream of flow,rather in a dribbling manner He was investigated as follows: 1) Urine R/E--- Pus cells: Plenty, RBC : 20-30/ HPF, Albumin++ Sediments +2) Plain X-ray KUB region: A large dense rounded radio opaque shadow measuring about 6cm X 4cm behind the pubic symphysis and there was also evidence of Spina bifida at the level of S_{1-4}. 3) Serum Urea level – 3.1 mmol/ L and Creatinine level ---80 µmol /L 4) Hb%--115 gms /L. 5) ESR – 25mm / 1sthr. 6) Total and differential count of WBC were within normal limit. 7) IVU: There was gross bilateral

Hydroureteronephrosis and distended urinary bladder with an impacted stone in the bladder neck area. (Picture: 3).

Uro-dynamic study and evaluations like uro-flowmetry & Uro-cystometry and perineal electromyography could not be done.



Picture: 3

A diagnosis was made as a case of Spina bifida with sphincter dysfunctions involving the bladder and bowel leading to obstructive uropathy and constipation respectively. Patient was managed by surgical intervention to relieve the obstruction performing a suprapubic cystolithotomy under general anaesthesia with a great difficult to disimpact the stone from the site of impactation at the bladder neck region. (Picture: 4)

Picture: 4

Postoperative period was uneventful. He was discharged from the hospital with some improvement in the ability to evacuate the bladder and a better urinary stream but incontinence persists to a lesser extent. He was advised as follows: a) Perineal muscle exercise. b) Use of soft penile clamp. c) Intermittent urethral catheterisation[2]. d) Follow up IVU after six weeks. d) Urinary antiseptics periodically and lastly to drink plenty of fluids.

Comments: Spina bifida has a diverse mode of presentation[3]. In our case it was associated with

urinary incontinence and presented by obstructive uropathy which could have been a prelude for an endangering situation to life.

Key points:

- Patients with urinary incontinence should be assesed and dealt with care.
- Spina bifida is one of the commonest causes. This fact should borne in mind while dealing with similar case.
- Earliest possible diagnosis and adequate management can prevent many serious complications and improve the quality of life style.
- Though a specialised and multidisciplinary corrective procedures are possible and also available in developed countries[4], a simple physical therapy with proper advices and lastly public awareness are of great value.

Acknowledgements

We are thankful to Dr.W.A.Mamun (Asstt. Prof. of Anaesthesiology), Dr.Mobinul Hoque(Asstt.Prof. of Radiology) and Department of Pathology USTC, and all the staffs of BBMH & USTC who helped us to complete this job.

References:

1. Langman's Medical Embryology, 7th edition, T.W. Sadler, International edition-1995 published by Williams & Wilkins,428 E. Preston Street,Baltimore,USA. P-385.
2. Nelson's Text Book of Paediatrics by Richard E.Behman, Victor C.Vaughman-1993, Published by W.B.Sunders Company, USA. P-1562.
3. Bailey and Love's Short Practice of Surgery: 23rd edition, 2000, Published by Arnold, 338-Euston road, London, P-458.
4. Clinical Urology Illustrated, by R.B. Browse, Published by MTP press limited, International Medical Publishers-UK 1992, P-357.