

THE STATUS OF THE ANAL SPHINCTER IN PATIENTS WITH POST-OBSTETRICAL VESICOVAGINAL FISTULAS.

Hypothesis / aims of study

We regularly see patients with irreparable post-obstetrical vesicovaginal fistulas due to the size of the fistula or destruction of the continence mechanism. One of the options we offer these patients is a continent diversion utilizing the intact anal sphincter, usually a sigma pouch ureterosigmoidostomy. Using retention enema testing, we found the anal sphincter status to be surprisingly good in these patients. We then performed this study to formally assess the status of the anal sphincter mechanism in patients presenting with post-obstetric vesicovaginal fistulas. This would assist in planning such diversions and also in offering patients appropriate treatment if the anal sphincter function is compromised.

Study design, materials and methods

Twenty-eight consecutive female African patients with post-obstetrical vesicovaginal fistulas were studied. The average age was 22 [16-32] years old. None of the patients had overt rectal injuries or neurogenic abnormalities. All patients had eventually been delivered by caesarean section after prolonged labour. Standard four-channel anorectal manometry was performed on all 28 patients before any operative treatment or physiotherapy was commenced [1]. Lateral pelvimetry X-ray images in the radiology archives of African patients with obstructive labour were examined to assess the level of arrest of descent of the foetal head.

Results

The resting tone and motility of the rectum had a pressure range of 15-22 [18] mm Hg. The resting anal sphincter pressures ranged from 75-87 [83] mm Hg. The anal squeeze pressures showed increases above the resting pressure of 100-140 [122]%. The recto-anal inhibitory reflex showed relaxation pressures of 25-50 [38] mm Hg. The lateral pelvimetry x-ray images showed that in all African patients with obstructive labour the foetal head remained above the pelvic brim, did not enter the true pelvis and remained well above the pubo-rectalis muscle.

Interpretation of results

The resting rectal tone and anal sphincter pressures were well within normal limits as were the increases observed during squeezing of the anal sphincter. The recto-anal reflex showed normal anal innervation and reflexes in all patients. The lateral pelvimetry x-ray images showed that the foetal head remained well above the level of pubo-rectalis muscle until a caesarean section was done. The anal sphincter complex in these patients did not receive the same direct crushing or pressure injury and damage as the base of the bladder.

Concluding message

1. Anal sphincter function was found to be well preserved in African patients with post-obstetrical vesicovaginal fistulas, without overt rectal injuries or neurogenic dysfunction.
2. This is probably due to the high arrest of the foetal head during obstructive labour in African patients and the fact that all eventually were delivered by caesarean section [2].
3. In the vesicovaginal fistula patient with no anorectal symptoms, no further anorectal management is necessary.
4. Retention enema testing in the ward is probably adequate assessment before a sigma pouch ureterosigmoidostomy is recommended to these patients in whom urinary continence cannot be restored.

References

1. Practical Guide to Gastrointestinal Function Testing; Oxford, Blackwell Science Ltd, 1997 [214-224].
2. Amer J Obs Gyne [2002] 187; 1194-1198.

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HUMAN SUBJECTS: This study was approved by the The Ethics Committee of the University of KwaZulu Natal, Durban, South Africa and followed the Declaration of Helsinki Informed consent was obtained from the patients.