

A 10 YEARS REVIEW OF MITROFANOFF CONTINENT URINARY DIVERSION IN THE ADULTS

Hypothesis / aims of study

To analyse the long-term results of Mitrofanoff continent urinary diversion (MCD) undertaken in an exclusive adult population with a minimum follow up of 10 years.

Study design, materials and methods

Patients who underwent MCD since 1990 were considered for the study. Out of 29 patients who underwent MCD to date, patients who have at least 10 years follow up were selected. There were 14 patients including seven men and seven women with a mean age of 55 years (range 19-79) at operation. Indications for the operation were bladder cancer in eight patients, neuropathic bladder, incontinence, exstrophy, tuberculosis of the bladder and chronic cystitis in one each. Three unfortunate patients died because of non-urological causes at 1.5 years (mean) after the operation and one patient was lost to follow up. Ileocaecal segment augmentation of the bladder was done in all patients. Appendix was used as the catheterisable conduit in 12 patients and ileum in two patients. 12 umbilical stomae and one right iliac fossa stoma were created. Retrospective follow up data was collected including serum creatinine and upper tract imaging. Patients were seen at their clinic appointment and evaluated for the technique of catheterisation and assessed clinically for any complications.

Results

Median follow up is 10.5 years. All our patients are still continent with their original stoma. In the immediate post operative period one patient developed intestinal fistula with associated wound infection that was treated conservatively and one patient had prolonged ileus. Time (median) to stricture was 12 months (range 2 to 31 months). Stomal stenosis was seen in eight patients who required stomal dilatation. One of the five required three dilatations and another required four dilatations. Six patients required catheterisation at hospital at least once in the last ten years. Stomal reconstruction was done in two patients for recurrent stenosis. Urinary tract infections seem to be the commonest complication occurred in all but one patient. Unilateral upper tract dilatation was seen in two patients and three patients showed bilateral upper tract dilatation. None of our patients showed abnormal creatinine at their last follow up. There were two patients with renal calculi that required extra-corporeal shock wave lithotripsy (ESWL). None of our patients had bladder calculi.

Interpretation of results

Our results are comparable to the published results although there is only scarce data published on adult population (1, 2). None of our patients had bladder stones although it has been reported in up to 32% of the patients (3) and also there is no deterioration of renal function judged by serum creatinine seen in any of our patients despite recurrent stomal complications. All our patients are happy except for one patient who is unhappy because of impotence secondary to surgery.

Concluding message

Although MCUDs have a few minor complications, most of them being stomal stenosis and UTIs, they have been accepted by our patients in general. Our results are comparable with the published series and we conclude that MCUDs are effective in offering continence with out any major deterioration of renal function and can be considered in suitable cases even in the adult population.

References

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