

CONTINENT URINARY DIVERSION — 6 YEARS EXPERIENCE WITH INDIANA POUCH RESERVOIRS.

Aims of study

Indiana type continent urinary diversion has been carried out in patients with various bladder pathologies since 1996, and now we report our success rate and complications.

Methods

13 female and 7 male patients with a mean age of 48.25 years (range being 18 to 73 years) had Indiana pouch made from caecum and right colon after detubularisation. Tapering of the terminal ileal segment over a 12F catheter along with plication of the ileo-caecal valve provided the continence mechanism. Ureteral implantation along the taenia of colon using Le Duc Camay technique ensured the anti-reflux mechanism. Other procedures performed in conjunction with Indiana were radical cystectomy (8); simple cystectomy (4); excision of malfunctioning ileal conduit (4) & CLAM (1); and anterior exenteration (3). Regular follow-up was arranged to assess the success rate and any complications.

Results

Before surgery all patients were properly assessed, counselled and informed consent was obtained. Although the same surgeon in all patients made the Indiana pouch, however, another surgeon was involved to perform radical cystectomy or anterior exenteration in cancer patients. Following surgery ureteral stents and suprapubic catheters were removed within 3 weeks after a satisfactory pouchogram. Immediate post-operative complications were mild and transient responding to appropriate treatment (UTI in 3; PUO -? due to chest infection in 3; & bowel ileus in 1). Follow-up was arranged at regular intervals and ranges from 14 to 72 months.

Our results show an overall success rate of 87.5% with respect to continence. Functional results show daytime catheter interval being >4 hours, draining >400mls each time and nighttime interval is >6hours in all except 2 — mild incontinence occurred following strenuous exercise especially when the pouch was too full. Late complications were either pouch related [mucous plug blockages (2); stomal problems (2); ureteral obstruction (1) and pouch fistula due to recurrent tumour (1)], or pouch unrelated [recurrent abdominal pain due to sub-acute small bowel obstruction (1); small sinus lateral to incision line (1) and impotence (3)].

Conclusion

Indiana pouch reservoir offers reliable continence rate of 87.5%, and satisfactory protection of upper tracts with the use of Le Duc technique. Patient compliance with catheterisation was good (93%), and complication rate is also acceptable when compared with other similar techniques.