Peritoneal Dialysis Access. Prospective Randomized Trial of 3 Different Peritoneal Catheters Preliminary Report

Editar:

Ever since the introduction oflong-term peritoneal dialysis for end-stage renal failure in the 1960s, peritoneal access problems have been a major source of morbidity in these patients. Catheter complication rates for surgically inserted straight Tenckhoff catheters average about 17% for failure to drain, 25% for exit-site infections, and 13% for subcutaneous leaks and hernias (1). No prospective randomized study has looked at different catheter outcomes. We undertook such a study having initially done a prospective audit on outcome of catheter placements, over a 6month period, when 41 consecutive straight double cuff Tenckhoff insertions through paramedial insertions were assessed. Eleven patients (27%) required further surgery because of failure to drain, and 2 patients required three and four procedures, respectively. There were, in addition, two early leaks that settled after conservative therapy, two wound infections, and two late catheter migrations. Of the 41 insertions, 21 had complications (51 %), an unacceptably high rate.

A randomized prospective study using standard double-cuffTenckhoff, Toronto Western double-disk, and standard coiled catheter was undertaken in 89 patients. Catheters were surgically inserted under standardized conditions and surgical techniques. The three groups were matched for demographic data. The results (Table 1) revealed no difference in outcome with similar complication rates over a mean follow-up of 12 months (5 19 months) in the three catheter groups.

This study reveals that com plications secondary to catheter insertion can be considerably reduced if the standardized surgical technique is adopted. It also indicates that any study of this nature usually reduces complications if more scrupulous attention is given to detail. In addition, a dedicated team of surgical and medical catheter inserters is essential (2). Our study also reveals that constant audit of experiences is essential to identify problems, but corrective measures can be introduced.

TABLE 1
Number of patients with immediate (peroperative), early (within 4 weeks of insertion), and late (beyond 4 weeks) complications in the three groups of patients, in whom outcome data are also shown

	Type of Catheter		
	Straight	Curled	Oreopoulos
No. of Patients	30	30	29
Complications			
Immediate			
Omentectomy	1	0	2
Failure to drain	0	0	1
Adhesiolysis	0	2	1
Early			
Fluid leaks	2[a]	0	0
Failure to drain	1	2	0
Wound infection	1	1	0
Wound hematoma	0	1	2[b]
Urine retention	2	1	0
Catheter migration	1	0	0
Late			
Bilateral inguinal hernia	1	1	0
Persistent process. vag.	0	1	0
Exit-site hemorrhage	0	1	0
Outcome			
Failed			
Peritonitis	3	2	4
Loss of UF	1	0	1
Failure to cope with PD	0		
Subtotal	4	4	7
Successful			
Functioning	18	16	16
Transplanted	7	7	3
Died	1	3	3
Subtotal	26	26	22
Total	30	30	29

[a] 1-dehisence.
[b] 1 infected cannula removed.

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