A novel thermo-expandable ureteral metal stent for the minimally invasive management of ureteral strictures.

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Abstract

PURPOSE:

We assess the safety, efficacy, and cost of the novel long-term indwelling thermo-expandable Memokath ureteral stent for the management of malignant and benign ureteral strictures.

MATERIALS AND METHODS:

Since October 2004, we treated 73 patients (34 men), ages 23 to 84 years (mean 57.7) with 86 ureteral strictures (13 bilateral) with the Memokath 051 stent. The causes of the strictures were benign in 55 cases and malignant in 31 cases. Follow-up included radiography, renal ultrasonography, and renography if needed after 2 weeks, 3 months, and then every 6 months.

RESULTS:

The mean operative time was 23 minutes, while the mean hospital stay was 1.5 days. The average indwelling time of an individual Memokath was 11.2 months. After a mean follow-up period of 17.1 months, there were 68 stents in situ. In 12 cases, spontaneous resolution of the ureteral stricture was revealed after a mean indwelling time of 9 months. The remaining six cases were treatment failures. In 15 cases, because of late complications, a Memokath exchange took place after a mean period of 18 months. A total of 26 complications were revealed after the insertion of 102 Memokath stents. These included six cases of urinary tract infections; 15 stent manipulations were needed because of stent dislodgement, and 5 stents were removed because of encrustation and blockage. In the long term, the overall costs for the Memokath treatment and follow-up were considerably less than with the conventional Double-J stent.
CONCLUSIONS:

The ureteral Memokath stent is a promising, safe, and efficient treatment option for the minimally invasive management of both benign and malignant ureteral strictures.