Metallic Ureteral Stents: A Cost Effective Management in Malignant Ureteric Obstruction

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Objective:

For patients requiring long-term ureteral stenting, conventional polymer stents necessitate multiple exchanges per year, bearing significant financial cost and likely detrimental effect on patients' health. We report our experience with Resonance (Cook) metallic ureteral stent and present a cost analysis on its usage.

Patients & Methods:

Patients were prospectively recruited for metallic stent insertion from January 2012 to July 2014. Clinical outcome and database were prospectively reviewed. Cost analysis was based on fiscal year 2013. Total charges were based on stent cost, surgery and stent-related stay.

Results:

Twenty-three patients had successful metallic stent insertion with mean follow-up of 1-32 months. Mean total charge for metallic stent insertion was HKD\$43978 per patient, while estimated mean total charge for polymer stent (4 exchanges per year) would be HKD\$44838 per patient. Estimated total budget saved would be HKD\$19780. Compared to polymer stents, there was a potential financial savings of 45% (at 6 months) and 95% (at 12 months). Mean hospital stay for metallic stent insertion was 2.87 days, while polymer stent insertion required day admission. No patient had significant metallic stent related complications requiring hospital readmission.

Conclusion:

Metallic stent is a cost effective method in relieving ureteric obstruction in patients with more than six months of expected survival.