Commentary

The days of cost effective management for nephrolithiasis are already upon us

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Nephrolithiasis prevalence rates continue to rise globally and have nearly doubled within the United States over the last few decades. At the same time, health care costs have risen within the United States at an alarming rate. The economic burden of nephrolithiasis is estimated at greater than $5 billion annually. This estimate is based on direct cost related to healthcare delivery and indirect factors such as loss of productivity/work. Interestingly, medical expulsion therapy (MET) has been found to be more cost effective for ureteral stones than early endoscopic intervention, even when including increased emergency room visits for MET. A variety of medical and surgical options exist for symptomatic nephrolithiasis treatment. Unfortunately, concrete data is lacking as to the most cost effective surgical approach for nephrolithiasis. The issue of cost effectiveness quickly becomes more complex when the analysis begins to include stone size, location, cost of maintenance for endoscopes, laser fibers, etc. (1). Data is also limited as to the cost effectiveness of prevention of nephrolithiasis. Certainly the low upfront costs of general dietary recommendations (low salt diet, increased oral fluid intake, moderate protein intake, etc.) do not pose any great cost burden, but their effectiveness is unclear. Similarly, it is unclear as to the cost effectiveness of thiazides, potassium citrate, or other medications for the prevention of the various types of stone disease. With rising healthcare costs coupled with the rising prevalence of nephrolithiasis, not only is more research needed to provide greater clarity regarding the most cost effective approach to all types of nephrolithiasis, the importance of this type of research will only increase in the climate of increased scrutiny of healthcare expenditures.

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Footnote

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