

Practice brief: “LUMP” a novel acronym for reporting renal stone

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Abstract

Acronyms are every medical professional’s ally not only for an effortless record making but also to save time and space. TNM staging for malignant cancer which stands for Tumour, Nodes and Metastasis is an excellent example of commonly used acronyms. Looking at immense heterogeneity in the methods for clinical and academic characterization in summarising nephrolithiasis and its treatment options, we devised a simple scoring system called “LUMP”, intended for practical and feasible use. This acronym can be used by clinicians to readily and consistently classify patients with renal stones, for counseling about various treatment options, referral, prognosis, research reporting, follow-up etc.

Keywords: Acronyms, Imaging, Renal Calculi, Urology.

Introduction

Acronyms in healthcare are formed from the initial letters of words which may be relating to medications, procedure, previous history, diagnosis, treatment etc. An excellent example of acronym commonly used to summarize staging of a malignant cancer is TNM staging which stands for Tumour, Nodes and Metastasis. Various other such examples are popular among medical professionals. We, as urologist, have aspired towards easy representation of a frequently occurring entity of renal stones in our speciality. The major bulk of urology clinics worldwide are made by cases of asymptomatic or symptomatic, frequently recurring renal stones.¹ Five to 15% of the world population is affected by this disease, with a peak incidence between the third and fourth decade of life.^{2,3} Renal pelvicalyceal system is a complex anatomy and stone may be formed in any of the calyx. Management of such cases depends primarily on its location and overall burden. Due to immense heterogeneity in the methods for clinical and academic characterization in summarising nephrolithiasis and its treatment options, it would be logical to form a simplified homogenous system to brief such cases. Such a system would be a simple, reliable and a liberal approach with far-reaching implications on clinical

practice, patient counselling, outcome management, and research reporting.

We devised a simple scoring system called “LUMP” intended for practical and feasible use by clinicians worldwide to readily and consistently classify patients with renal stones. This system is cultured acquiring the terms that are present in literature, thoroughly discussing with seniors and colleagues and from information obtained from many high quality medical terminology texts. Instead of tedious description of nephrolithiasis in a patient, “LUMP” streamlines its number, size and situation distinctly.

Various investigations like ultrasonography of kidney ureter bladder (USG KUB), Intravenous Urogram (IVU), Computed Tomography (CT) KUB films formed the basis for this acronym. It is illustrated as:

L (n,s) stands for number and size (in mm) of largest stone in lower calyx.

U (n,s) stands for for no and size (in mm) of largest stone in upper calyx.

M (n,s) for no and size (in mm) of largest stone in middle calyx.

P (n,s) for no and size (in mm) of largest stone in renal pelvis.

Letter 'm' (multiple) is used instead of 'n' if there are multiple stones in a particular calyx/pelvis.

Prefix right and left is added to identify which kidney is involved.

Important details like degree of hydronephrosis, congenital anomaly (horse-shoe kidney, ectopic, mal-rotation etc), concomitant calculus in ureter, urinary bladder etc, can be added as a suffix.

For example, a 44 years old person had bilateral nephrolithiasis. CT urogram of this patient revealed multiple stones in right kidney (one stone of size 9mm in mid calyx and multiple stones in lower calyx, largest one 26mm) and left kidney (one stone of size 14 mm in mid calyx and multiple stones in lower calyx, largest one 16mm) [Figure 1A-C]. LUMP for this patient would be written as Right $L_{(m,26)}U_{(0)}M_{(1,9)}P_{(1,22)}$ and Left $L_{(m,16)}U_{(0)}M_{(1,14)}P_{(0)}$.

Its use is equally advantageous during follow-up or postoperative description of such cases.

The same patient was operated for bilateral PCNL and there was complete stone clearance as shown in postoperative X-ray KUB [Figure 1-D]. Post surgery LUMP of this patient is now changed to Right $L_{(0)}U_{(0)}M_{(0)}P_{(0)}$ and Left $L_{(0)}U_{(0)}M_{(0)}P_{(0)}$ which denotes that all of the kidney stones have been cleared.

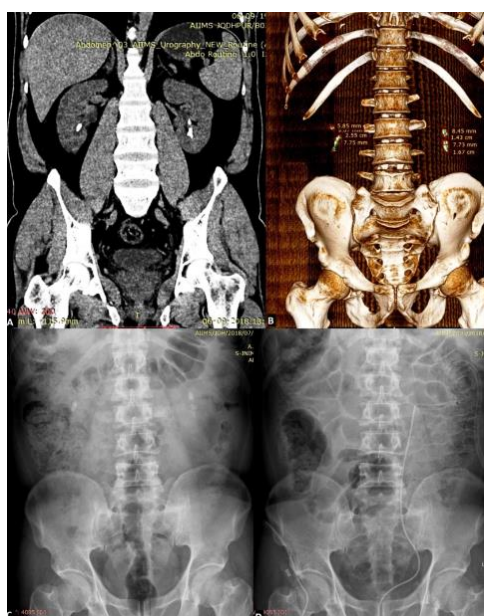


Figure 1 A-C: Coronal reconstructed CT images and X-ray KUB showing bilateral multiple renal calculi; **D:** Postoperative X-ray KUB of same patient showing complete clearance of stones.

Clinical implications of LUMP system:

1. LUMP scoring system is an easy and comprehensible approach for academic reporting of patients with renal stones. Besides being hassle free it helps in saving precious time of medical professionals.
2. It is very useful in systematically and quantitatively documenting renal stone burden in simplified way, patient counselling, pre-operative decision making and follow-up.
3. Homogeneity in use of this system will allow good communication between practicing urologists and researchers which will encourages focus on the optimal approaches to management of such cases.

Every scoring system has some limitation and further large scale multicenter prospective studies can help in determining the usefulness of this abbreviation. At present this system seems useful however it would require periodic modification and occasional substantial revision depending on advances in knowledge and technology, and increasing availability of treatment options across geographic regions. However the advantages of brevity should be weighed against the possibilities of obfuscation and ambiguity.

To conclude, it seems clear that the development of consistent and universally accepted nomenclature is a step toward documenting patients with renal stone disease. LUMP system is a simple method to document renal stone disease in a patient and if used correctly boost efficiency.

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Conflict of Interest

None.

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