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Research Article

A DESCRIPTIVE STUDY OF SYMPTOMATIC NEPHROLITHIASIS IN INDIANS

Suresh Buddha^{1*}

^{1*} Associate Professor of General Surgery, Gayatri Vidya Parishad Institute of Health Care and Medical Technology, Visakhapatnam, Andhra Pradesh, India.

ABSTRACT

Nephrolithiasis is a very common clinical presentation in our surgery outpatient department. Only few patients need hospitalization and surgical intervention for complications. Obstructive complications are one of them which need to be identified promptly. Hence in a busy outpatient department care must be taken to do over look them, as it carries greater risk of renal failure if not managed timely.

Keywords :- Nephrolithiasis, Renal calculi, Hydronephrosis.			
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INTRODUCTION

The study is primarily intended to analyse the nature of nephrolithiasis and its distribution, to identify the predominance in renal system, to identify obstructive complication in symptomatic nephrolithiasis, plan based on renal function and obstructive complication for early referral to the urology department.

METHODS AND MATERIALS:

A retrospective descriptive study was conducted in General Surgery, Gayatri Vidya Parishad Institute of Health Care and Medical Technology, Visakhapatnam, Andhra Pradesh, India and the data collected from chart review, laboratory investigation and ultrasonography.

Inclusion criteria: Who presented with symptoms and signs of nephrolithiasis and undergone a renal function test and an ultrasound of renal system.

Exclusion criteria: Patient who has not been investigated has been excluded.

RESULTS:

A total of 236 patients records were extensively studied by our team, Results analysis using Microsoft excel was done.

From our study of 236 patients diagnosed as cases of nephrolithiasis, 70% of which are male patients. 50% patients belonged to the age group of 31-50 years. The youngest patient in the study was 12 years of age.

CONCLUSION:

Nephrolithiasis is a very common problem globally and it incidence and prevalence has increased tremendously [1]. The epidemiology of nephrolithiasis differs according to geographical area and socioeconomic conditions and 70% are seen in developed countries [2].

A symptomatically significant stones range from 3mm to 5mm which can actually pass through the urinary tract as the narrowest portion of the renal system the vesicoureteral junction is 5mm but due to the stone impaction there is mucosal edema which narrows the lumen results in hydronephrosis [3].



So the size of the calculi does not matter due the mucosal edema narrowing the lumen. The study shows that hydronephrosis is involved in 30% of our study population.

The age distributions with respect to distribution we had a patient 12 year old child also. So the pediatric age is no exemption. It can occur in any age group including pediatric age group[4-5].

And it is commonly seen as unilateral involvement and at times can be a megaureter[6] than bilateral involvement

of kidney. 53.6% of the cases occurred on the left side. And it is essential for an investigation to detect the obstructive complication and Intravenous pyelography is indicated[7].

Hence it is essential to investigate all patients with signs and symptoms of renal calculi for early deduction of obstructive complication and preventing end stage renal disease[8]. And investigation of renal function test or CT of Kidney Ureter Bladder can be done. And prompt referral to urology department for active intervention.

REFERENCES

- 1. Victoriano Romero, MD, Haluk Akpinar, MD, and Dean G Assimos, MD, Kidney Stones: A Global Picture of Prevalence, Incidence, and Associated Risk Factors. Rev Urol. Spring-Summer 2010. 12(2-3): pp86-96.
- 2. Amato M1, Lusini ML, Nelli F. Epidemiology of nephrolithiasis today. Urol Int. 2004;72 Suppl 1:1-5.
- 3. SinghI, Strandhoy JW, Assimos DG. Pathophysiology of urinary tract obstruction. In: Wein AJ, ed. Campbell-Walsh Urology. 10th ed. Philadelphia. 2011: chap 40.
- 4. Douglass B. Clayton, John C. Pope. The increasing pediatric stone disease problem, Ther Adv Urol. Feb 2011; 3(1): 3-12.
- 5. Alpay H1, Ozen A, Gokce I, Biyikli N. Clinical and metabolic features of urolithiasis and microlithiasis in children. Pediatr Nephrol. 2009 Nov;24(11):2203-9.
- 6. Rosenblatt G.S., Takesita K., Fuchs G.J. Urolithiasis in adults with congenital megaureter. Canadian Urological Association Journal. 2009 Dec;3(6)
- 7. Dorairajan L.N., Hemal A.K., Gupta N.P., Wadhwa S.N. Primary obstructive megaureter in adults: need for an aggressive management strategy. International Urology and Nephrology. 1999;31(5):633-641
- 8. M Ounissi, et. al, Nephrolithiasis-induced end stage renal disease. Int J Nephrol Renovasc Dis. 2010; 3: 21–26.

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