

**Original article:**

## **Study of prevalence and demographic profile of bladder calculi**

**Dr Vijay Murlidhar Thorat , Dr Bhushan Lohokare\***

Dept. of Surgery, Soham Hospital and Medical Foundation PVT Ltd , Nashik, Maharashtra

Corresponding author\*

### **Abstract**

**Introduction:** Although reports of such stones were rare at the time, their prevalence seems to have increased over the next 5000 years, so much so that stone-cutting experts now became part of the so-called lithotomists who led Hippocrates to persuade his followers to abandon this. work for them.

**Materials and methods:** A total of 40 cases of bladder infections were investigated at our hospital. It included basic bladder stones, other ureteric stones and subsequent stones in bladder obstruction and external body bladder.

**Results:** Indications for urinary incontinence increase over the years., But inevitably the level of renal and ureter counts increases in adults and children.

**Conclusion:** Individual counting cases are very high in males in all age groups, according to the current study.

### **Introduction:**

Although reports of such stones were rare at the time, their growth seems to have increased over the next 5000 years, so much so that stone-cutting was now part of a group of so-called lithotomists who led Hippocrates to urge his followers to leave the profession themselves. <sup>1</sup> Over the years, cases of bladder stones, especially in children, have declined over time with industry. <sup>1</sup> Bladder Stones (Bladder Calculi) Bladder stones are hardened clumps of minerals that form in the bladder. Up to 75 percent of all kidney stones are composed primarily of calcium. Stones can also be made up of uric acid (a normal waste product), cystine (a protein building block), or struvite (a phosphate mineral). Stones form when there is more of the compound in the urine than can be dissolved. This is happening as people's nutrition improves and their ability to lead. Vitamin A deficiency and bladder stones were the most common find. Both have almost disappeared from the well-fed part of India. However pediatric diseases and adult stone disorders have increased in the form of renal and ureter calculi.<sup>2</sup>

### **Materials and methods:**

40 cases of bladder stones admitted in our hospital Hospital were studied. It included primary bladder stones, ureteric bladder stones and stones secondary to bladder outlet obstruction and foreign body in bladder.

This was observational study conducted for duration of one year. Sample size was estimated with help of expert. We included routinely admitted patients with diagnosed as bladder calculi.

The complicated cases , CRF patients were excluded from present study.

**Observation:**

**Table No. 1: Gender -wise distribution of cases of Bladder Calculi:**

	No. of cases	Percentage (%)
Male	38	74
Female	12	26
Total	40	100.00%

**Table No. 2: Types of Bladder Calculi out of total cases:**

Type of Bladder calculi	Male	Female
Primary or endemic	32	7
Secondary	6	5
Total	38	12

We find incidence of secondary bladder calculi is increase throughout the years., but definitely the incidence of renal and ureteric calculi has increased in adult as well as children.

**Discussion:**

40 cases of bladder stones admitted in our hospital Hospital were studied. It included primary bladder stones, ureteric bladder stones and stones secondary to bladder outlet obstruction and foreign body in bladder. This was observational study conducted for duration of one year. Sample size was estimated with help of expert. We included routinely admitted patients with diagnosed as bladder calculi. <sup>3</sup>The complicated cases , CRF patients were excluded from present study. In our study , we find incidence of secondary bladder calculi is increase throughout the years., but definitely the incidence of renal and ureteric calculi has increased in adult as well as children.<sup>4</sup>

Incidence and prevalence of kidney stones are increasing worldwide and are evident in all genders, races, and ages. Changes in dietary practices may be a major factor influencing these processes and the impact of global warming. The whole reported series agrees with the fact that bladder stones are more common in men. The typical image of bladder stones in women is similar to that of men but at a much lower level. The difference is clearly related to the anatomical differences in the sexual urethra, which are particularly noticeable in childhood. However, other factors such as how to drain the neck of the bladder, closing pressure etc. there should be a difference in the bladder formation in men and women. So why calcia is one of the highest in males of all ages remains unexplained and will require further testing.<sup>5,6</sup>

There is historical evidence of the influence of food on stone formation. The first recorded outbreak of stone disease occurred in the mid-16th century when the European Stein-Schneiders (stone masons) discovered that their services were much needed. During this time, there was progress in food production and corn became a staple food. Increased consumption of starchy foods from corn promoted obesity, which is currently a known risk factor for stone formation.<sup>7</sup>

**Conclusion:**

Incidence of bladder counts is higher in males of all ages according to the current study.

**References:**

1. Anderson D A : The nutritional significance of primary bladder stones: *British Journal of Urology*: 34:160:1962.
2. Bapat S.S.: Endoscopic removal of bladder stones in adults: *British J. of Urology*: 1977.
3. Asper R, Schmuckio: Socioeconomic aspects of urinary stone disease in Euresia in the nineteenth and twentieth century in Ryall R, Brockis J G, Marshal V et al (eds): *Urinary stone*: New York; Churchill Livingstone: 1984.
4. Aurora A L, Shrinivas Rao, Shrimathi V: Effect of constituents of artificial urine on spontaneous precipitation of calcium oxalate monohydrate: *Indian Journal of Medical Research*: 72:273:1980.
5. Londasale: Further studies on bladder calculi: *Indian Journal of Medical Research*: 648-654: 1977.
6. Taneja O P and Gupta D. N: Bladder stone disease of childhood part I: An epidemiological study: *Acta Paediatrica Scandinaria*: 59;177:1970.
7. Romero V, Akpınar H, Assimos DG. Kidney stones: a global picture of prevalence, incidence, and associated risk factors. *Rev Urol*. 2010;12(2-3):e86-e96.