

Gender Prevalence of Urolithiasis in Albania: Our Data

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Abstract

Urolithiasis remain a problematic nosology in many countries and regions, however, there are studies that bring data on this nosology even in location, size and gender as well. We would like to bring in light our data in respect of gender prevalence of urolithiasis on our population study.

In our prospective study from 2011 to 2014, of 200 subjects who were admitted to emergency service, respectively City Hospital of Mat, where 122 subjects were diagnosed with urolithiasis, and 67 % of those subjects were males, or in other words 82 subjects, and 33 % were female subjects, or in other words 40 subjects. In many studies there are data on gender and age as well in respect to urolithiasis. Our data, even in modest population would like to present and compare with literature and bring to the respective state authorities' attention for any future prospects.

Keywords: Urolithiasis, prevalence, gender, Albania

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Introduction

According to previous studies previous decades on urolithiasis the gender prevalence of urolithiasis was more in man than women, however, recent studies show that this trend has changed due to many factors, so we are having today more women than man with urolithiasis.^{1,2}

Some studies do look at dietary aspects, like amount of fluid intake, obesity, dietary intake in general. There are studies that show data on specific aspects like composition of the stone, age groups, regions, races, ethnicities and more other specific elements.³

Another problem we face in Albania, as in other nosologies and disciplines of medicines, we still do not have solid data on group age, regions of the country, gender, urolithiasis components, or solid diagnostic and treatment protocols.

A recent study was published on epidemiologic study of urolithiasis in seven countries of south east of Europe: S. E. G. U. R. 1 Study, like Greece, Turkey, Serbia, Northern Macedonia, Rumania, Bulgaria, Italy, unfortunately Albania was not part of this study project which would have brought solid data as a national reference on this respective nosology.⁴ The epidemiology of the urolithiasis nosology itself has changed constantly in respect to many other aspects like environment, geography regions, and ethnicity as well. So continuity of research on this matter is to bring up to date data and evidence based information where clinical practice is based on.

Review of literature

In recent Italian observational, descriptive, retrospective trial that was conducted in 2012, resulted that prevalence of urolithiasis in Italy was 4.14 % and was higher prevalence in males than females, respectively 4.53 % versus 3.78 % in females.⁵ There was seen a positive relation with increasing age. In respect to regions, the highest prevalence was seen in Campania around 6 % and the highest incidence in region of Sicilia 3.15 per 1000 population.

It was shown in a study that the incidence of urolithiasis in Greece was estimated from 5 – 15 %, however there was stated that not data exist so it was only an estimation.⁶ Another study showed that prevalence of urolithiasis in Greece was 15 %.⁴

A national health survey in Serbia in 2013, in a cross sectional study that was carried out for national representative sample population of Serbia, 5.6 % self reported kidney disease.⁷

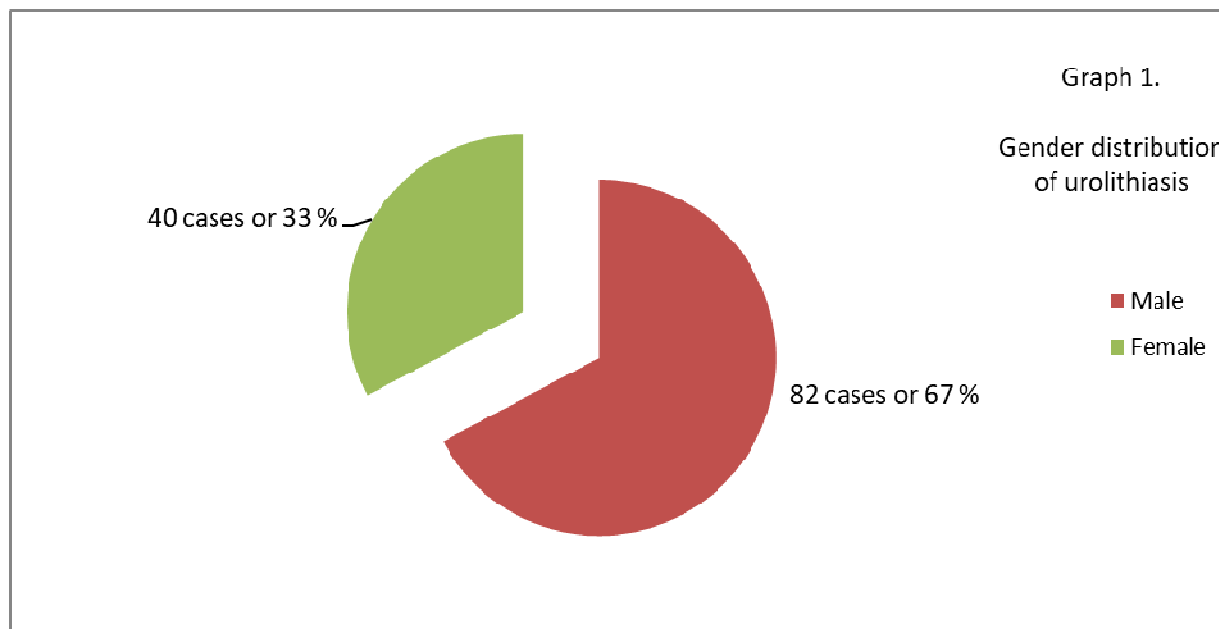
According to study data, in Romani and Serbia was a higher rate of recurrent urolithiasis than other 5 countries that were part of the study.⁴

Results and discussion

Our data obtained from a prospective study of a period of 3 years, 2011 - 2014, of a population study group 200 subjects where 122 were diagnosed with urolithiasis, 82 subjects of total population of 122 diagnosed subjects or

of 200 total population that were seen in emergency department, concludes of 67 % were male versus 40 subjects or 33 % female, illustrated in table one and graph 1.

Gender	Nr. i cases	Percentage %
Male	82	67
Female	40	33



Our data correlates well with Italian and other regional studies where more male than female are affected by urolithiasis so far, however, recent studies show that a tendency towards a shift a gender related aspect of this nosology.

We need a national study to determine a solid evidence based professional opinion and work in guidelines in order to population awareness, prevention, early diagnosis and proper management of urolithiasis in our population.

Conclusions

Urolithiasis is the third most common urological problem, and it remains high prevalent, including Albania. Our data showed that males were affected almost two time more than females, 67 % percent males versus 33 % females. Gender affection of this nosology in most studies remain male more than female, however there are data that this is switching to be more prevalent in female than in male. In Albania we need to have more data in regards to any disease including urolithiasis based on our studies and our population based studies in order to project a healthier population and take all measures that are necessity.

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