

Seasonal variations of renal colics and urolithiasis: is this the time for a shared benchmark to study the phenomenon?

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Epidemiologic findings for nephrolithiasis are conflicting because of the complex network of the affecting factors and natural history of the disease itself. The issue presented by Boscolo-Berto in response to our paper demonstrated another facet of this conflict [1]. His recent paper showed a correlation of the climatic feature 15–30 days prior to renal colic [2]. Therefore, taking samples in the last month of each season did ideally eliminate the impact of the past season, although may have lost the people who presented earlier than the sampling time. In other words, it is expected that the last month of each season represents the net climatic impact better than any other time. One may suppose that the peak incidence may occur earlier than the last month in any given season; however, comparing the same time of each season rules out any bias in comparison, though may underestimate the incidence rate. The peak temperature in summer occurs in the second month of this season, then, given the findings presented by Boscolo-Berto, the highest incidence in summer is expected in the last month. In contrast, the impact of humidity is not so

easy for analysis. Hydrometeorologic reports for the same year of our study demonstrated that mean peak humidity rate broadly varied within the regions and no particular association was observed between the mean humidity and stone incidence. However, it seems that the peak annual

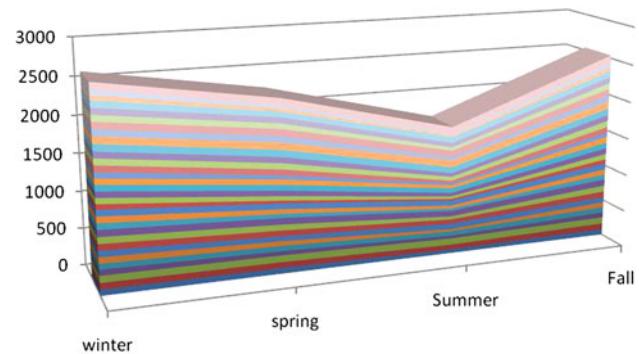


Fig. 1 Seasonal variation in mean peak humidity rate

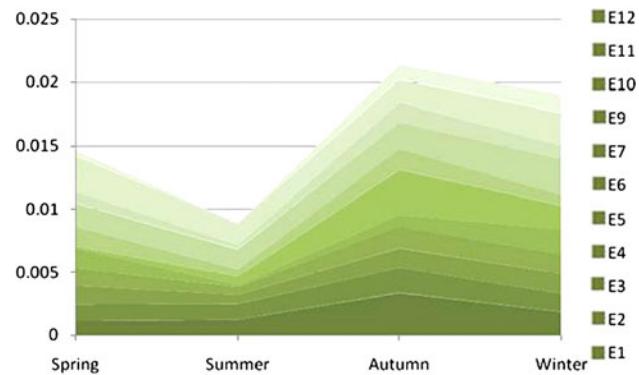


Fig. 2 Seasonal variation in urinary stone incidence as illustrated by cumulative incidence of ecologic zones across Iran, E8 is declined due to sampling problems. X axis represents seasons, Y axis demonstrates incidence rate [1]

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incidence is preceded by the least maximal humidity in the summer (Figs. 1, 2). Such a complex analysis could be prospectively investigated when the individual information is recorded, not the mean values for each region. Additionally, many co-factors must be controlled including physical activity, drinking and diet.

All in all, while we disagree with Boscolo-Berto about the sampling method, we support his suggestion for a shared benchmark to study the phenomenon.

References

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