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LETTER TO THE EDITOR

Active stone removal for ocotogenarians and nonagenarians with nephrolithiasis: pros or cons

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Dear Editor,

With great interest, we read the article by Eredics et al. [1] published online in World Journal of Urology. This multicentric retrospective study preliminarily confirmed that surgical treatment was appropriate for ocotogenarians and nonagenarians with nephrolithiasis. The results showed that the estimated survival times after urinary diversion, flexible ureteroscopy, percutaneous nephrolithotomy and extracorporeal shock wave lithotripsy were 21.3, 28, 29.3 and 45.4 months, respectively. No serious complications occurred in those patients. We sincerely congratulate the authors for their research results, which provide guidance for the management of elderly patients with renal calculi. However, some issues deserved further clarification.

Firstly, it was not mentioned in the paper that the survival time of those hospitalized patients who did not accept any surgical treatment. The persuasion of the results could be reinforced by the addition of a comparative analysis of a subgroup of nonsurgical patients.

Secondly, the results showed that active stone treatment was more frequently done in men, patients under 90 years of age, in smaller stone burdens, as well as those being less frail and in absence of indwelling catheters (all $p < 0.005$). Besides, the survival time of them was longer than those patients who only accepted urinary diversion. However, many factors can affect the survival times of elderly patients, such as hypertension and diabetes which can shorten life span [2, 3]. The overall physical condition of patients who had active stone removal was better than those with an indwelling catheter. Prolonged survival times was not necessarily due to active stone removal.

According to the authors' conclusions, we understand that stone removal can prolong patients' survival times. It is worth noting that compared with other lithotripsy methods, extracorporeal shock wave lithotripsy with the lowest stone clearance rate [4, 5] but it led the longest survival time of patients. This suggests that removing the renal stones can improve survival time but it is not the most important factor. This result may be related to the minor trauma of extracorporeal shock wave.

For elder patients who suffer from kidney stones, many factors can affect their longevity. We believe that improving the study design could get more reliable and clear conclusions.

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Declarations

Conflict of interest The author(s) declare no conflict of interest.

Ethical approval This article does not contain any studies with human or animal participants performed by the authors.

Informed consent All authors consent for the publication of the article.

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