ANALYSIS OF THE AGE-RELATED CHARACTERISTICS OF RENAL CANCER

Atakhanov Murad Matyakubovich
Urgench Branch of Tashkent Medical Academy
Assistant, Department of Nephrology, Hemodialysis, Traumatology and Orthopedics
E-mail: muradatahonov@yandex.ru
ORCID: https://orcid.org/0009-0005-5449-0601

Introduction. Renal cancer is one of the oncological diseases that poses a significant threat to public health. Age, sex, lifestyle, environmental factors, and individual characteristics play an important role in its development. Investigating the age-specific distribution of renal cancer is essential for identifying high-risk population groups, organizing targeted preventive examinations, and improving opportunities for early diagnosis.

Keywords: renal cancer, age groups, oncological diseases, sex, regional distribution, prevention.

Aim of the Study. To analyze the age-related characteristics and distribution of patients with renal cancer by sex and geographical region, and to identify the age group with the highest prevalence of the disease.

Materials and Methods. The study analyzed data from 126 patients diagnosed with renal cancer. The mean age of the patients was 57.8 ± 0.6 years, with an age range of 27 to 77 years. The study population was stratified according to age groups, place of residence, sex, and anatomical localization of renal involvement. The results were expressed as absolute numbers and percentages.

Results and Discussion. According to the study findings, the largest proportion of patients with renal cancer belonged to the 60–74-year age group, comprising 53 patients (42.1%). Patients aged 45–59 years accounted for 31 cases (24.6%), those aged 18–44 years for 28 cases (22.2%), and those aged 75–90 years for 14 cases (11.1%). No cases of renal cancer were recorded among individuals aged 90 years and older. These findings indicate that renal cancer occurs predominantly among middle-aged and older individuals. The regional analysis revealed that the highest number of cases was registered in Qo‘shko‘pir District, with 21 cases (16.7%). Yangiarik District and Khiva city and district each accounted for 18 cases (14.3%). Cases of renal cancer were also identified in other districts of Khorezm Region. Regarding anatomical localization, left kidney involvement was observed in 70 patients (55.5%), right kidney involvement in 52 patients (41.3%), and bilateral kidney involvement in 4 patients (3.2%). The sex-based analysis demonstrated that renal cancer was more frequently detected in men, accounting for 70 cases (55.6%), compared with 56 cases (44.4%) among women.

Conclusion

The study findings demonstrated that renal cancer was most frequently observed among individuals aged 60–74 years. The disease was more frequently recorded in men than in women, and left-sided renal involvement predominated. Regional analysis revealed a relatively higher number of cases in Qo‘shko‘pir District. These findings emphasize the importance of strengthening preventive examinations, identifying high-risk population groups, and improving early diagnostic measures, taking into account the age- and sex-related characteristics of renal cancer.

© 2026 London International Monthly Conference on Multidisciplinary Research and Innovation. All Rights Reserved.