## **Abstract**

## Self-medication of patients using immunosuppressive drugs

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**Introduction and aims:** Self-medication can be used to treat minor health problems without consulting a doctor. The aim of this masters thesis was to analyse the use of potentially risky overthe-counter medicines, dietary supplements or food in patients with a history of kidney disease taking immunosuppressants.

Methods: Data for the cross-sectional study were obtained in the form of a controlled interview with patients of the Nephrology Consultation of the Teaching Hospital Hradec Králové. The guided interview was carried out by the researcher in the form of phone calls with patients in March 2022 through a structured questionnaire. The questionnaire was compiled on basis of a literature search and knowledge gained about possible interactions between immunosuppressants and over-the-counter medicinal products, dietary supplements and food. Patients with kidney disease who had been taking at least one immunosuppressant (cyclosporine, azathioprine, mycophenolate, prednisone, tacrolimus or rituximab) for past six months were included in the study. The questionnaire included: socio-demographic data (e.g., age, gender); data on method of use of immunosuppressants (e.g., time of day, method of use with respect to food); data on the use of health-promoting products for the last six months (e.g., vitamins, minerals); data on the consumption of selected foods and methods of solving minor health problems (e.g., pain, fever). The comprehensibility of the questionnaire was tested. The obtained data were analyzed and described by descriptive statistics.

**Results:** Informations was provided by 41 respondents (91 % of respondents). Only ten patients were unlikely to have made any mistakes in taking immunosuppressants or self-treating acute problems. In 16 (39 %) patients, errors in immunosuppressant use were noted: incorrect use of immunosuppressant in relation to food, incorrect timing or incorrect choice of drink. In approximately 1/3 of the patients, misuse of vitamins, minerals or inappropriate foods was identified. Signs of improper self-treatment of a health problem were found in 40 % of patients.

**Conclusions:** The results showed that patients were deficient in their use of immunosuppressants and in self-treatment of minor health problems. Interventions including patient education, proper dispensing of immunosuppressants in the pharmacy, or the development of a patient guide for immunosuppressed patients could reduce the frequency of patient errors.

**Key words:** self-medication, pharmaceutical care, immunosuppressants.