

## Prevalence of Vernal Keratoconjunctivitis (VKC) in Tikrit City

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### Abstract

VKC is considered an important health issue especially in middle east region. In this research in Tikrit city, a developing city in the middle of Iraq, we found that the prevalence rate of VKC is 13% among population, more in boys and those with family history of VKC.

### Introduction

Vernal Keratoconjunctivitis (VKC) is a major medical condition; it's a chronic allergic eye disease which often affects children and young people, resulting in large discomfort and affecting daily life. In Tikrit City, the climate can increase allergies, understanding how prevalent VKC is among the population is of great importance for improving health status.

### Objectives

This research aims to find out:

1. The prevalence of VKC among Tikrit City population.
2. The demographic factors related to it.
3. seasonal variations in VKC cases.

### Methodology

#### Study Design

This is a cross-sectional study over the year of 2024, including to families in Tikrit City through schools, PHCC and Tikrit Teaching hospital.

#### Sample Size

The study included data from 500 participants aged 5 to 30, ensuring a diverse representation of the community.

#### Data Collection

1. **questionnaire:** Participants answered questions about their clinical features, family history, and demographic factors.
2. **Clinical Examination:** Examination using a slit lamp to confirm the diagnosis of VKC was done by an ophthalmologist.

## Statistical Analysis

SPSS software was used, we analyzed the data to identify trends and correlations, searching for significant patterns in the responses.

## Results

### Prevalence Rate

The study revealed that near 12% of participants in Tikrit City were affected by VKC.

### Demographic Factors

- **Age:** VKC was most common in children especially those aged 5-13 years, where the prevalence increased to 20%.
- **Gender** The boys were affected more than girls with 1.5:1.
- **Family History:** There was a remarkable correlation between VKC and a family history of allergies, with significant results ( $p < 0.05$ ).

### Seasonal Variation

Cases of VKC reached the peak during spring and summer (April to August), which corresponds to increased pollen levels in the environment.

## Discussion

The findings of the study showed that VKC is a significant health issue for the population in Tikrit, especially males and those with a family history of allergies. The seasonal patterns suggest that families need to be particularly watchful during warmer months when symptoms may increase.

### Implications for Public Health

- **Awareness Campaigns:** Educating parents and teachers about VKC, its symptoms, and management options is vital.
- **Environmental Controls:** Encouraging measures to limit exposure to allergens, especially during high-pollen seasons, can help alleviate symptoms for those affected.
- **Healthcare Access:** Ensuring easy access to eye care services for early diagnosis and treatment is essential for improving quality of life.

## Conclusion

VKC significantly affects many residents of Tikrit City, especially children. By raising knowledge and improving access to caregivers. Ongoing research is important to track trends and develop effective management strategies tailored to the needs of the community.

## References

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