Short communication

Diagnosis of acute follicular conjunctivitis: A 5-year retrospective analysis in a referral center

J.C. Serna-Ojeda*, P. Nuñez-Rivera, J. Quevedo-Martínez, M. Álvarez-López

Instituto de Oftalmología «Conde de Valenciana», Mexico City, Mexico

A R T I C L E   I N F O

Article history:
Received 26 May 2014
Accepted 3 November 2014
Available online 28 August 2015

Keywords:
Acute follicular conjunctivitis
Follicular conjunctivitis
Conjunctivitis
Mexico city
Monthly distribution

A B S T R A C T

Objective and methods: A retrospective analysis was performed using the medical records in a referral center in Mexico over a period of 5 years, in order to determine the frequency of acute follicular conjunctivitis.

Results and conclusions: A total of 859,986 ophthalmology consultations were given, from which 8,930 were diagnosed with acute follicular conjunctivitis (1.03% of the total). The number of patients diagnosed range between 100 and 200 in the majority of months. In August 2012 an increase was observed with 308 cases, and then decreasing after two months. This study did not demonstrate a highest frequency by month, with exception of year 2012 that showed a peak incidence in the third trimester.

© 2014 Sociedad Española de Oftalmología. Published by Elsevier España, S.L.U. All rights reserved.

Diagnóstico de conjuntivitis folicular aguda: un análisis retrospectivo de 5 años en un centro de referencia

R E S U M E N

Objetivo y métodos: Para determinar la frecuencia de la conjuntivitis folicular aguda, se analizó de manera retrospectiva los expedientes médicos en un centro de referencia en México durante un periodo de 5 años.

Resultados y conclusiones: Un total de 859.986 consultas oftalmológicas fueron otorgadas, de las cuales 8.930 fueron diagnosticadas con conjuntivitis folicular aguda (1,03% del total). En la mayoría de los meses hubo un rango entre 100 y 200 pacientes. En agosto de 2012 se

---


** Paper presented at the annual meeting of the Association for Research in Vision and Ophthalmology (ARVO), May 2014, Orlando, FL, United States.

* Corresponding author.
E-mail address: juanc.serna@gmail.com (J.C. Serna-Ojeda).
2173-5794/© 2014 Sociedad Española de Oftalmología. Published by Elsevier España, S.L.U. All rights reserved.
Introduction

Even though acute follicular conjunctivitis can have several etiologies, conjunctivitis due to adenovirus is the most frequent cause of viral and infectious conjunctivitis and is a frequent reason for ophthalmological consultations.

Follicular conjunctivitis due to adenovirus causes epidemic outbreaks in hospitals and communities as well as significant economic loss due to labor disability. The distribution of this infectious conjunctivitis can follow several patterns throughout the year, although this is not clearly defined. The objective of this study is to determine the amount of acute follicular conjunctivitis in a referral ophthalmological institution in Mexico City in the course of 5 years, and analyzing the monthly distribution thereof.

Material and methods

A clinical and retrospective study was carried out in the «Conde de Valenciana» Ophthalmology Institute, reviewing diagnostics in the hospital system of the institution covering a five-year period (January 1, 2008 to December 31, 2012). Inclusion criteria: patients of both sexes with a diagnostic of acute follicular conjunctivitis. Exclusion criteria: patients with a diagnostic of acute follicular conjunctivitis due to other infectious agents such as primary herpes simplex, herpes zoster, acute trachoma among others, as well as non-infectious conditions such as toxic conjunctivitis caused by medication. Elimination criteria: consecutive diagnostics of the same patients 2 months after the first diagnostic or those consisting in consecutive consultations for the same infectious condition. The result was that the majority of the remaining diagnostics were acute follicular conjunctivitis due to adenovirus, with diagnostic based on clinical examination. Percentages were calculated by means of descriptive statistics for categorical variables, while for numerical variables the central, mean or median tendency was used according to distribution. Data were represented in tables and figures.

Results

Within said five-year period, 859,986 consultations were provided by the institution of which 8930 were for acute follicular conjunctivitis, accounting for 1.03% of ophthalmological consultations. Overall, 5314 (59%) of patients were female and 3616 (41%) were male. The mean age was 44 years (range: 0–97 years).

The majority of patients, 8832 (98.9%) were defined only as acute follicular conjunctivitis without mention of a specific syndrome or etiological suspicion.

The monthly distribution of acute follicular conjunctivitis diagnostic in the course of the 5 years of the study is shown in Fig. 1. It can be seen that in most months there is a range between 100 and 200 diagnostics. The month with the lowest amount of diagnostics was November 2008 with 85 diagnostics. In contrast, August 2012 exhibited a peak in the amount of diagnostics (308) which diminished 2 months later to 190 in October 2012.

To determine any tendency regarding the monthly distribution of acute follicular conjunctivitis, a graft was made with

Fig. 1 – Monthly distribution of acute follicular conjunctivitis diagnostic throughout the five-year period.

Fig. 2 – Overall distribution per month of acute follicular conjunctivitis throughout the five-year period.
the overall monthly amount covering said 5 years. The results are shown in Fig. 2.

Discussion

The data presented herein on the distribution of acute follicular conjunctivitis in a five-year period demonstrate that, despite some reports indicating higher frequency of this condition in some month due to higher temperature and humidity, or in winter due to more closeness between people, the present study did not reveal seasonal peaks. A similar monthly frequency was found, with the exception of 2012 which exhibited a higher number of diagnostics in the third quarter. The limitations of this study are the inclusion of exclusively clinical diagnostics without laboratory confirmation and the possibility that the acute follicular conjunctivitis diagnostic was applied excessively to visiting patients.

Conflict of interests

No conflict of interests has been declared by the authors.

REFERENCES