A SURVEY OF OPHTHALMOLOGISTS REGARDING CLINICAL PRACTICE FOR DRY EYE AND RHEUMATIC DISEASES

Keywords: Education

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Background: Diagnostic delay is a major problem in rheumatic diseases that can present with symptoms often underestimated by patients. Often, the rheumatologist is not the first specialist to encounter these patients, and the lack of referral can lead to a significant delay in diagnosis.[1] Dry eye disease is a condition seen frequently by ophthalmologists that can be one of the first signs of a serious rheumatic condition such as Sjögren’s Syndrome.[2] Thus, collaboration is needed between specialists for the diagnosis and treatment of these diseases. One study addressed this issue in the United States, showing a significant under-referral to rheumatologists.[2] To date, no such investigations have been done in Italy.

Objectives: The aim of our study was to evaluate the use of functional tests and validated scores among ophthalmologists in the work-up of patients with dry eye to investigate the possible presence of a rheumatic condition.

Methods: A multiple-choice questionnaire was submitted to participants of the Ocular Surface Inflammation course held in Bologna in September-October 2022. The questionnaire was administered to all the participants before the start of the course. The questions were designed to assess the knowledge of specialists in ophthalmology regarding signs and symptoms of rheumatic diseases associated with dry eye, their preferences regarding the use of functional tests to investigate dry eye in their clinical practice, and whether or not they used validated scores. Functional tests investigated included were fluorescein staining of the cornea, tear break-up time, limane, green staining of the conjunctiva, rose bengal staining of the conjunctiva, and Schirmer’s test. Ocular scores considered were the National Eye Institute Visual Function Questionnaire (NEI-VFQ), and Ocular Surface Scoring System (OSS).

Results: Twenty ophthalmologists participated in the survey. The estimated prevalence of dry eye among the participants’ patients is summarized in Table 1. Ten ophthalmologists reported rheumatological referrals in <5% of cases, four in 5-20% of cases, three in 20-50% of cases, and three in >50% of cases. When presented with patients with dry eye, other signs and symptoms investigated by the ophthalmologists during the patient history and clinical examination were: arthritis or arthralgia (35%, n=7), xerostomia (85%, n=17), dry skin or cutaneous rash (65%, n=13), and periodontitis or cavities (30%, n=6). When asked to rank the most frequent functional tests performed in patients with dry eye, 55% (n=11) reported that the fluorescein test was their top choice, followed by Schirmer’s test (35%, n=7) and tear break-up time (10%, n=2). More than half of the participants reported not using clinical scores in the management of patients with dry eye, while 15% (n=3) used the DED severity grading scale, 10% (n=2) used the NEI-VFQ, and 10% (n=2) used both the NEI-VFQ and OSS.

Conclusion: This preliminary data suggests that dry eye is a very frequent condition encountered by ophthalmologists that is often underestimated, and patients are not always properly screened for associated rheumatological conditions using validated scores and functional tests or referred to a rheumatologist. Large studies to further investigate awareness of potential rheumatological conditions in the field of ophthalmology are needed, and the creation of “dry-eye teams” comprised of ophthalmologists and rheumatologists may be useful to avoid diagnostic delay.

REFERENCES: