LETTER TO THE EDITOR

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Studies on Ocular Infection

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Dear Editor,

Ocular infections, if untreated, can damage the eye structures and lead to visual impairment and even blindness.[1,2] Therefore, causative pathogen profiles should be regularly updated to determine the management strategies for evolving strains of potentially vision-threatening microorganisms.

In connection with this, we refer to the article published in the March 2023 issue of the *Oman Medical Journal*.[3] The authors missed including our article, which that was published a year before their publication, likely owing to their search methods.[4] The substantial strengths of our study included its large sample size and long study duration. These factors, we believe, rendered it a potentially worthwhile addition to any systematic review and meta-analysis on this topic. We take this opportunity to mention the gist of our study below.

We assessed the ocular infection profiles at Farabi Eye Hospital,[4] the largest eye hospital in Iran, to which many patients from all regions are referred—rural, urban, and even overseas. A total of 16 656 specimens were submitted within a seven-year period from patients with a mean age of 48.3 years. Initially, microorganisms were detected in 7224 (43.4%) specimens, of which 5039 (69.8%) were from outpatients and 2185 (30.2%) from inpatients. However, no microorganisms were detected in 9432 (56.6%) specimens in the initial smear, of which 4999 (53.0%) were from inpatients and 4433 (47.0%) from outpatients. Of the 7224 specimens with microorganisms detected in smears, gram staining revealed bacteria in 6515 (90.2%) specimens, of which 4567 (70.1%) were from outpatients and 1948 (29.9%) from inpatients; fungi in 672 (9.3%) specimens, of which 232 (34.5%) were from inpatients and 440 (65.5%) from outpatients; and both microorganisms in 37 (0.5%) specimens, of which five (13.5%) were from inpatients and 32 (86.5%) from outpatients.

Nearly half of the specimens submitted from outpatient clinics yielded microorganisms at the initial assessment and most were bacterial. The specimens obtained from the cornea were the most prevalent ones, irrespective of seasons. The most isolated bacteria were *Pseudomonas aeruginosa*, followed by *Staphylococcus epidermidis* and *Streptococcus pneumoniae*.

A substantial limitation of our study was that it failed to measure the incidence of ocular infections. However, unlike many previous studies with limited samples (including our previous study),[5] this study is important because of its large sample size and long duration, making it unique within the Middle East and Asia.

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