

## DETECTION OF THE MOST COMMON CAUSES OF EPIPHORA IN IRAQ

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**ABSTRACT :** This study was designed and intended to reveal the etiology of epiphora or Watery eyes referrals to ophthalmology department in Baquba teaching hospital. Cross-sectional study we blindly select 200 patients complaining of epiphora Baquba teaching hospital. Data collection was done in the ophthalmology department in outpatient clinic of the hospital. Patient demographics, past history and ophthalmic examination has been done for the selected subjects. There were 200 subjects with a primary complaint of epiphora. They included (55%) females and (45%) males with an average age of 56.9±23.9y. The most common causes of epiphora were lacrimal obstruction (50%); followed by reflex tearing (36%) and eyelid malposition (14%). Differences in prevalence of aetiology were noted in the terms of age and gender distribution. In conclusion, epiphora is a common condition generally affecting babies and older people with many etiology. A thorough history and examination are required to provide the appropriate treatment to the underlying cause.

**Key words :** Epiphora, etiology, watery eyes, lacrimal obstruction.

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### INTRODUCTION

The principal structure of the tear-producing and drainage system of the eye is the lacrimal apparatus which comprises the lacrimal gland, lacrimal puncta, canaliculi, lacrimal canal, lacrimal sac and nasolacrimal duct (Blackmore, 2010). There is a mechanical process that moves the tear sac across the surface of the eye and into the lacrimal apparatus (Sibley, 2013).

Epiphora or tearing is the presence of a watering eye, which is a common complaint about referrals to the ophthalmology department for evaluation. The etiology of tearing can be divided into two categories: reflex tearing and reduced tear outflow (Mainville, 2011).

The primary cause of epiphora is an obstruction that prevents drainage at any level of the nasolacrimal system or even the lack of drainage related to eyelid diseases. Another cause may be the reflex hypersecretion related to ocular surface diseases such as dry eye or the combination of all these situations (Sibley, 2013 and Mainville, 2011).

Maintaining optical quality and proper eye function requires a steady tear production. If secreted tears do not drain adequately and properly, symptomatic epiphora

or (over production of tears) might ensue (Ma, 2014). The average annual incidence of symptomatic lacrimal outflow blockage was 30.47 per 100,000, according to a study done by Woog, and the occurrence rose with age. Epiphora prevalence will continue to rise as life expectation rises, according to recent demographic trends in many nations, and will have a considerable impact on quality of life (Viso, 2012).

Therefore, in this literature we aimed to detect the most common predisposing factor of epiphora in Iraq by using cross sectional study through which, we established a proper therapeutic approach for the patients.

### MATERIALS AND METHODS

Cross-sectional study we blindly select 200 patients complaining of epiphora Baquba teaching hospital, Data collection was done in the ophthalmology department in outpatient clinic of the hospital. Patient demographics, past history and ophthalmic examination has been done for the selected subjects.

All subjects' demographics, medical and ocular histories were gathered. Patients were asked about the duration and frequency of tearing, as well as symptoms of dry eye (such as burning sensation, itching, scratch to

the eyes and blurred vision) and lacrimal blockage (including epiphora, discharge and crusting).

Tear film assessment, eye lid margin telangiectasia, foamy discharge in the tear meniscus, pouting or plugging of Meibomian openings, Meibomian secretions expression, eyelid site, trichiasis, medial canthal structure,

males with an average age of  $56.9 \pm 23.9$ y. which indicates that the elderly patients were more inclined to have a complaint of epiphora. This finding is consistent with recent studies reported age distribution of tearing according to etiology (Ansari, 2015 and Nemet, 2014). Causes of epiphora between female and male were significantly different in our study-lacrimal obstruction was more common in women than men. Consistent with our findings (Ma, 2014). The most common cause of epiphora was lacrimal obstruction (50%); followed by reflex tearing (36%) and eyelid malposition (14%). Differences in prevalence of etiology were noted in terms of age and gender distribution. these agree with Viso (2012). Specifically, the blockage of the lacrimal system 28% occurs in upper system, 72% occurs in lower system) (Nemet, 2014). At the follow up evaluation, subjects reported between a complete resolution or significant improvement in their symptoms. Therefore, the management of epiphora should be considered as a multifactorial issue.

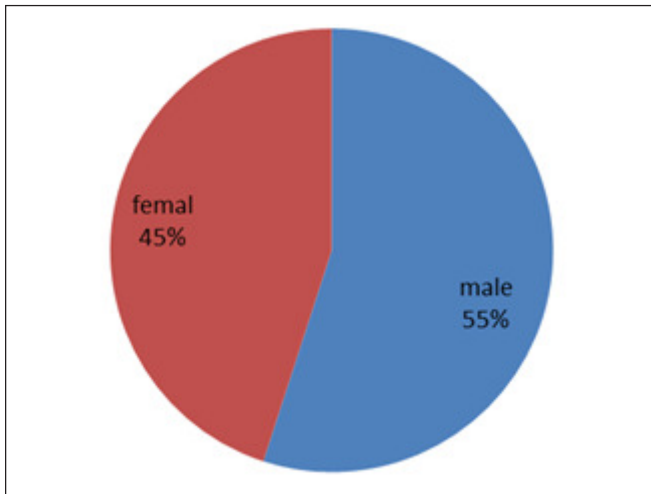


Fig. 1 : shows distribution of epiphora in males and females.

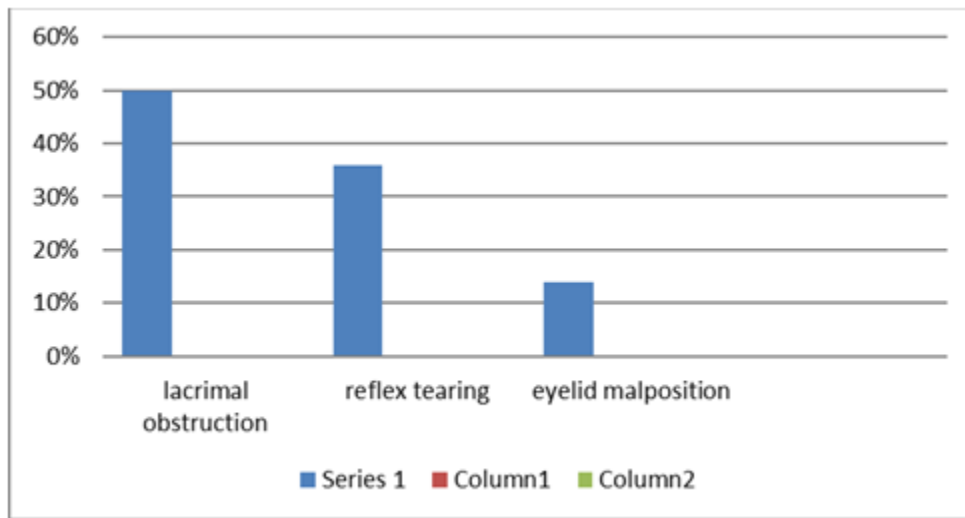


Fig. 2 : shows distribution of causes of epiphora.

punctal location and the presence or absence of dacryocystitis were all found on slit-lamp examination. Schirmer test, tear break-up time or (TBUT) and irrigation were among the other procedures used to determine the patency of lacrimal system.

Patients, who had previously undergone lacrimal or eyelid surgery, had facial nerve palsy, or had previously received therapy for symptom-related diseases were excluded from the study.

**RESULTS AND DISCUSSION**

There were 200 subjects with a primary complaint of epiphora. They included (55%) females and (45%)

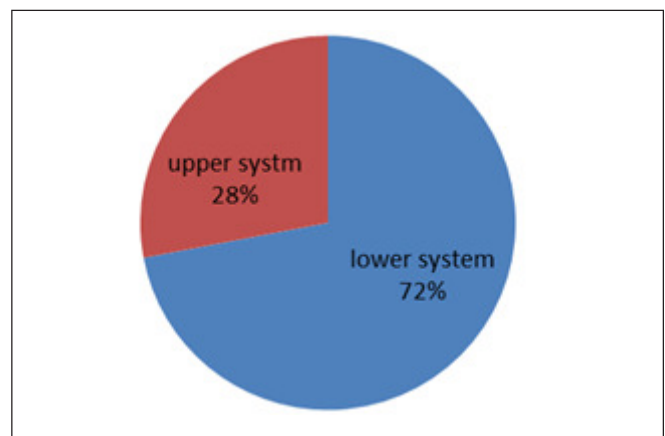


Fig. 3 : shows distribution of site of blockage of the lacrimal system.

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