

Controversies in the history of glaucoma: is it all a load of old Greek?

Contemporary medical terminology frequently stems from ancient Greek origins. However, there is some controversy relating to the true derivation of the word "glaucoma". The disorder, now defined as glaucoma, was first documented by the Ancient Greeks in 400 BC.¹ "Glaucoma" was first mentioned in Hippocratic writings as a blinding disease occurring most commonly in the elderly.² The description stated "that once the pupil has the colour of the sea – eyesight is destroyed and you will often find that the other eye is also blind". It is thought that this condition probably included various sight-threatening conditions including cataract and keratitis in addition to glaucoma. Opacification of the cornea or the lens resulting in apparent discolouration of the eye would have made the condition recognisable without ophthalmoscopic or slit-lamp technology. It is highly likely that the only type of glaucoma recognised in ancient times was symptomatic acute glaucoma and that the associated corneal oedema resulted in the disorder being grouped together with other conditions such as cataracts or those affecting the cornea.

It has been proposed that the word glaucoma originates from the ancient Greek word γλαξ – γλακος (glaukos) a noun and adjective originating from the verb 'γλασσω' (glauaso), meaning "to glow" or "to shine". The adjective describes someone who or something that glows or shines, this perhaps relating to the "hot" eye with acute glaucoma. However, with respect to colour, the ancient word also represents "blue-white" or "blue-green" and in the case of eyes it is thought to represent eyes having the light-blue or sea-green hue attributable to corneal oedema/opacification or cataract. In the English literature the derivation of the word glaucoma is always stated as relating to this bluish or greenish colour. However, the Greek word "glaukos" also means owl, which is thought to be so-named because of the bird's fierce, big and glowing eyes. The ancient Greek goddess Athena and the city named after her (Athens) was named γλαυκωπιτη in Greek and this translates to "glaucomati" meaning "having the eyes of an owl", thought to reflect the fact that she was so wise (like an owl). This ornithological (from greek ornitha meaning bird or chicken) issue increases the controversy relating to the exact origin of the word 'glaukos' and thus 'glaucoma'. There is thus a chicken (or perhaps owl!) and egg problem, since it is unclear as to whether the word glaukos was first used as a verb (to glow/shine), adjective (blue-green) or noun (owl). Another possibility in favour of the noun is that congenital glaucoma was recognised in ancient times and that large buphthalmic eyes had the appearance of large owl eyes.

In addition to its controversial glossological (from the Greek "glossa", meaning language) derivation, glaucoma management and especially the introduction of the trabeculectomy has been another centre of debate. Although the first trabeculectomy is often attributed to Cairns in Cambridge,³ a year earlier, the Greek Koryllos was the first to publish details of this guarded penetrating filtration procedure that he called a trabeculectomy.⁴ Koryllos described this filtering surgical technique with the construction of a scleral flap and subsequent drainage of fluid via the gap between the

scleral and conjunctival flap, little different to the trabeculectomy that is commonly performed today. His publication, however, received little attention since it was published in a Greek journal infrequently read worldwide. Perhaps glaucoma is more Greek than we realise.

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