

## DESCRIPTION OF BEHCET'S SYNDROME IN THE HIPPOCRATIC THIRD BOOK OF ENDEMIC DISEASES\*

BY

ARYEH FEIGENBAUM

*Jerusalem, Israel*

THE term "ophthalmia" (ὀφθαλμία) is used rather vaguely in the Hippocratic writings for "inflammation of the eye", and the restriction of the term to "inflammation of the conjunctiva" occurs much later.†

In the course of an investigation of the history of ophthalmia, I found that Hirschberg (1899), in his history of ophthalmology, quoted a passage from Hippocrates out of its context and was unable to identify the condition described. Hirschberg's text reads as follows:

In dem gleichfalls echten dritten Buch von den Volkskr. ist von einer stärkeren Epidemie von Augenentzündung, bei pestbringender Witterungsbeschaffenheit, die Rede.

ὀφθαλμῖαι ὑγραὶ, μακροχρόνιοι μετὰ πόνων. ἐπιφύσεις βλεφάρων ἔξωθεν, ἔσωθεν, πολλῶν φθείροντα τὰς ὄψιας, ἃ σῦκα ἐπονομάζουσιν.

(Fließende Augenentzündungen von langer Dauer, mit Schmerz: Auswüchse an den Lidern, aussen wie innen, vieler Sehkraft zerstörend, die sogenannten Feigen).

Diese Krankheit ist schwer zu deuten. Am ehesten kann an das ganz akute Trachom denken, wer diese Krankheit wirklich aus eigener Beobachtung kennt. Allerdings sind Auswüchse an der Aussenfläche der Lider dabei nicht vorhanden.

This passage from Hirschberg may be rendered in English as follows (German translated by author and Greek by W. H. S. Jones, Loeb Edition, 1923):

In the third book, . . . also genuine, a more severe epidemic is described occurring in a pestilential atmospheric condition. *Watery inflammations of the eyes, chronic and painful. Growths on the eyelids, external and internal, in many cases destroying the sight, which are called "figs"*. It is difficult to make out what disease this may have been. Trachoma would suggest itself to anyone familiar with this disease, although no growths occur on the exterior of the lid in trachoma.

\*Received for publication November 15, 1955.

† For example, in the third book of Galen's "De compositione medicamentorum secundum locos" (ed. Kühn, 1826), we read: "Ophthalmia is an inflammation of the conjunctiva" (Ἐστὶ οφθαλμία πλεγμονὴ τοῦ ἐπιπεφυκῶτος ὑμένου).

The whole passage from Hippocrates, which reads thus in the Greek of the Loeb edition (1923), is less difficult to interpret:

VII. Ἦσαν δὲ καὶ ἄλλοι πυρετοὶ, περὶ ὧν γεγράφεται. στόματα πολλοῖσιν ἀφθώδεα, ἐλκώδεα. βεύματα περὶ αἰδοῖα πολλά, ἐλκώματα, φύματα, ἔξωθεν, ἐσωθεν. Τὰ περὶ βονβῶνας. ὀφθαλμῖαι ὑγραί, μακροχρόνιοι μετὰ πόνων. ἐπιφύσεις βλεφάρων, ἔξωθεν, ἔσωθεν, πολλῶν φθείροντα τὰς ὄψιας ἢ σῦκα ἐπονομάζουσιν. ἐφύετο δὲ καὶ ἐπὶ τῶν ἄλλων ἐλκῶν πολλά καὶ ἐν αἰδοίοσιν. ἀνθρακες πολλοὶ κατὰ θέρος καὶ ἄλλα ἃ σὴψ καλεῖται. ἐκθύματα μεγάλα. ἔρπητες πολλοῖσι μεγάλοι.

The translation of the whole passage by W. H. S. Jones in the Loeb edition (1923) runs as follows:

VII. There were other fevers also, which I shall describe in due course. Many had aphthae and sores in the mouth. Fluxes about the genitals were copious ["frequent", "common"]; sores, tumours external and internal; the swellings which appear in the groin ["a curious phrase; I suspect that τὰ hides a corruption of the text"]. *Watery inflammations of the eyes, chronic and painful. Growths on the eyelids, external and internal, in many cases destroying the sight, which are called "figs"*. There were also often growths on other sores, particularly in the genitals. Many carbuncles in the summer, and other affections called "rot". Large pustules. Many had large, tetters.

An earlier English version, published by F. Adams in 1849, includes two interesting footnotes:

But there were also other fevers, as will be described. Many had their mouths affected with aphthous ulcerations. There were also many defluxions about the genital parts, and ulcerations, boils (*phymata*), externally and internally, about the groins.<sup>(a)</sup>

*Watery ophthalmies of a chronic character, with pains; fungous excrescences of the eyelids, externally and internally, called figs, which destroyed the sight of many persons.*<sup>(b)</sup>

There were fungous growths, in many other instances, on ulcers, especially on those seated on the genital organs. There were many attacks of carbuncle (anthrax) through the summer, and other affections, which are called "the putrefaction" (*seps*); also large ecthymata, and large tetters (*herpetes*) in many instances.

(a) "about the groins"—"This description apparently can refer to nothing but pestilential buboes".

(b) "destroyed the sight of many persons"—"It is impossible not to recognize this as a description of purulent ophthalmia".

Obviously Adam's assumptions do not reckon with clinical conditions which were unknown to him.

The whole paragraph suggests that the condition described by Hippocrates may be identified with the syndrome reported in 1937 by H. Behçet of Istanbul. The symptoms originally described by Behçet comprised the triad: aphthous stomatitis, ulcers around the genitals, and recurring (hypopyon) uveitis. Further experience and the re-interpretation of earlier observations have added other symptoms: attacks of fever, erythema-nodosum-like eruptions, dissemination of pustules over the skin, and neuroretinitic foci with or without a chronic uveitis which frequently leads to blindness. All these are manifestations of a chronic septicaemia with oral, ocular, and

genital metastatic lesions. Four detailed case reports with a comprehensive survey of the literature were published by Feigenbaum and Kornblueth (1946) and I have since had the opportunity of observing six additional cases. Most of the recorded cases in modern times were of natives of the Eastern Mediterranean, our own first patient being from the island of Rhodes.

"Watery inflammation of the eyes, chronic and painful" indicates lacrimation because of photophobia caused by iridocyclitis, and the remark on "destruction of the sight" is quite appropriate. Only the "growths on the exterior of the lids" do not fit into the usual picture of Behçet's syndrome.

The identification of a Hippocratic description of a disease endemic in ancient Greece with a contemporary sporadic disease affecting individuals with a "constitutional disorder" has some biological significance. Here is an example of a disease, originally endemic or epidemic during the Hippocratic period (the complete ignorance of the Hippocratic school of the contagious nature of some diseases is not relevant), which in the course of time has become sporadic. Similarly, a number of epidemic diseases, common in antiquity or in the mediaeval period, have become epidemiologically less significant in certain areas, for example leprosy and bubonic plague.

On the other hand, certain diseases, which were sporadic and even rare for long periods in the past, have recently become epidemic or endemic, for example the so-called punctate keratitis, which since the late 1930s has become almost universally known as epidemic kerato-conjunctivitis.

## REFERENCES

- ADAMS, F. (1849). "The Genuine Works of Hippocrates translated from the Greek", vol. 1, pp. 403-4. Sydenham Society, London.
- BEHÇET, H. (1937). *Derm. Wschr.*, **105**, 1152.
- FEIGENBAUM, A., and KORNBLUETH, W. (1946). *Acta med. orient. (Tel. Aviv)*, **5**, 139.
- GALEN (Claudius Galenus, 2nd cent. A.D.) "ΠΕΡΙ ΣΥΝΘΕΣΕΩΣ ΦΑΡΜΑΚΩΝ ΤΩΝ ΚΑΤΑ ΤΟΠΟΥΣ, III". *Claudii Galeni Opera Omnia*, ed. C. G. Kühn (1826), vol. 12, p. 599, Leipzig.
- HIPPOCRATES (5th cent. B.C.) "ΕΠΙΔΗΜΙΩΝ", Bk. III.
- HIRSCHBERG, J. (1899). "Geschichte der Augenheilkunde", in "Graefe-Saemisch Handbuch der gesamten Augenheilkunde", 2nd ed., vol. XII, pt 2, p. 70. Engelmann, Leipzig.
- JONES, W. H. S. (1923). "Hippocrates, with an English translation by W. H. S. Jones". *Loeb Classical Library*, vol. 1, pp. 246-7. Heinemann, London.