

### XIII.—Medical Terminology in Tragedy

HAROLD W. MILLER

FURMAN UNIVERSITY

The extant dramas of the three Tragedians contain a large number of terms with medical significance. The evidence relative to the use of these words assigns to them a technical or semi-technical status in the vocabulary of Hippocratic medicine. The nature of the term, the absence of earlier usage, the non-occurrence of most of the words in fifth-century literature other than Tragedy and the *Corpus*, and the manner in which the Tragedians employ them, suggests that they are derived ultimately (though probably not directly from any particular treatise) from the vocabulary of Ionic medicine. These terms were used consciously by the Tragedians, either literally or metaphorically, and with pronounced effect upon literary style.

In the process of the evolution of Tragedy in the fifth century B.C., the poets encountered a serious difficulty in the inadequacy of the language which they had inherited to express the new concepts and ideas of an intellectually flowering period. This inadequacy caused them to introduce many tragic neologisms and to borrow from earlier writers, particularly Homer, as Aeschylus said, as well as from contemporary developments in learning and science. One of the contemporary sources from which they derived ideas as well as language, as I think can be demonstrated, was medical science, which, originating early in the fifth century and separating from philosophical speculation, expanded rapidly and culminated in the figure of Hippocrates in the latter half of the century and in the composition of the older treatises of the Hippocratic *Corpus*. The influence of general medical ideas and language on Tragedy is extensive. Modern commentators have noted some medical terms, while metaphors from medicine, expressed in poetic or non-technical<sup>1</sup> language are employed in some plays with frequency, naturally with pronounced effect upon the style of the drama.<sup>2</sup> Further, several attempts have been made, though with somewhat inconclusive results, to show direct influence of treatises

<sup>1</sup> E.g., the term ἀξέσφατον ἄλλος *vulnus incompositum*, A. Ag. 1467, a metaphor of a wound which refuses to heal. Clearly Aeschylus was inspired in this terminology by a medical idea, but there is no evidence that the phrase was ever used technically in medicine.

<sup>2</sup> W. B. Stanford, *Aeschylus in his Style* (Dublin, 1942) 54-7, has discussed briefly the influence of medical language upon Aeschylus' style.

of the Hippocratic *Corpus* or of Hippocratic medicine in general on the language and ideas of the Tragedians.<sup>3</sup> This study is restricted to an examination of the technical or semi-technical medical terms used in Tragedy and similarly occurring in the Hippocratic *Corpus* or, in a few instances, in the physiological treatises of the pre-Socratic philosophers. Although such parallel usages cannot certify direct influence of any treatise of the *Corpus* upon the Tragedians, they do suggest that the use of the term in the oral and written tradition of medical science is the ultimate source for the occurrence of the word in Tragedy.<sup>4</sup>

The tragedies contain a large number of technical medical terms<sup>5</sup> whose use apparently derives, whether directly or indirectly, from the *Corpus*. For the most part, these terms may be paralleled in the older treatises,<sup>6</sup> usually occurring therein quite extensively.

<sup>3</sup> Cf. J. Psichari, "Sophocles et Hippocrate," *Rév. Philol.* 32 (1908) 104f. Although a minimum of technical terms are involved, Psichari shows, with some success, the general influence of Hippocratic medicine on the symptoms of Philoctetes' disease in Sophocles' *Philoctetes*, 730-826. J. Dumortier, *Le Vocabulaire Médical d'Eschyle et les Écrits Hippocratiques* (Paris, 1935), with less concrete results, attempts to demonstrate Hippocratic influence upon Aeschylus' vocabulary as regards, for the most part, words which must have been common to the language from Homer on, e.g., *θυμός*, *καρδία*, *φρήν*, *αἷμα*, *δάκρυ*, the common anatomical terms, etc. W. Nestle, "Hippocratica," *H* 73 (1938) 24-7, suggests, incidentally to another purpose, an Hippocratic provenience for several fragments of Euripides (292, 917, 981).

<sup>4</sup> It is not my suggestion that the poet, in using a medical term, borrowed consciously and directly from a particular Hippocratic treatise, for the filiation of such words, with rare exceptions perhaps, could scarcely be established unless the whole literature were extant, and not even then incontestably. Yet it is by no means inconceivable, either from the point of view of their intellectual activities or of chronology, that the three Tragedians had some acquaintance with the earlier treatises of the *Corpus* (cf. Nestle, *op. cit.*, 1f.; and Jones, *Hippocrates* [Loeb ed.], 1.xivf., even speaks of three pre-Hippocratic treatises in the *Corpus*). Further, some such terms may have gained a limited currency from medical usage, without having at that date become common to the language of everyday life, as their infrequent occurrence suggests. It should not be overlooked that philosophy and medicine were not separated until late in the fifth century.

<sup>5</sup> I have recorded all, I think, of the technical or semi-technical medical terms in Tragedy. However, *νόσος*, *νοσέω*, *ιατρός*, *λίσσμαι*, and similar words have been omitted. These words were common to the everyday language from very early times, used just as the corresponding terms in our language, and there is no reason to suspect any medical influence, except of the most general nature, when they occur.

<sup>6</sup> Though the various treatises cannot be dated precisely, there is almost general agreement as to those composed before the end of the fifth century B.C. Cf. *RE s.v.* "Hippocrates"; Jones, *Hippocrates* (Loeb ed.) 1. Introd.; J. Ilberg, "Die Arzteschule von Knidos," *BSAW, Phil.-hist. Kl.*, 76 (1924) 3.25; K. Deichgraeber, *Die Epidemien und das Corpus Hippocraticum*, *APAW* (1933) no. 3. Only these earlier treatises have been cited in the first list of words.

These words are further distinguished by the fact that, with a few exceptions, they do not occur in Homer, nor earlier than the tragic or Hippocratic usage cited, nor are they found at all, or only very rarely, in other fifth-century literature.<sup>7</sup> From the very nature of the word and because of its rare occurrence, or non-occurrence, elsewhere, there is every likelihood that the Tragedians were consciously using a word derived from the technical vocabulary of medicine.

*αἰμορραγῆς φλέψ* S. *Ph.* 825. This adjective (found only here) does not occur in the *Corpus*; but *αἰμορραγία*, *αἰμορραγέω*, *αἰμορραγικός* and other formations from the same root are used technically with the utmost frequency in the *Corpus* and later medical literature, though they do not appear elsewhere (e.g., Hp. *Aph.* 5.16; *Prog.* 23; *Epid.* 1.1.6, 12, 14, etc.). As used by Sophocles, this medical term is very closely analogous to the Hippocratic *αἰμόρρους φλέψ*, *Fract.* 11; *Art.* 86.<sup>8</sup>

*αἰμόρρυτοι φλέβες* A. *Fr.* 230N. With this phrase, for which there is no parallel, compare the Sophoclean and Hippocratic terms cited above.

*ἄκανθα* "spine" of man, E. *El.* 492; *Tro.* 117; cf. A. *Fr.* 275N. This is one of the terms regularly used in the *Corpus* of the spine (e.g., *Art.* 14, 45, etc.). Diogenes of Apollonia (Diels<sup>5</sup> B 6) twice used the expression *νωτιαίαν ἄκανθαν* in his physiological treatise.<sup>9</sup>

*ἀμβλυωπός* E. *Fr.* 1096N. Many words from this root recur frequently in the *Corpus*. Cf. *ἀμβλυωπία Aph.* 3.31; *ἀμβλυώσσω Prog.* 7;<sup>10</sup> and *ἀμβλυωγμός Prog.* 24. None is found outside of medical literature.

*ἀμφήμερος* (sc. *πυρετός*) S. *Fr.* 507. *ἀμφημερινός* is regularly found in the *Corpus* in distinguishing fevers as quotidian, tertian, or quartan. Cf. Hp. *Morb. Sacr.* 1; *Epid.* 1.6; *Nat. Hom.* 15.

<sup>7</sup> In the two following lists, I cite all the tragic uses of a word (unless stated to the contrary), but not all the Hippocratic uses. Additional references to the *Corpus* may be found for some of the terms in *LSJ*. If a word occurs in other fifth century literature, or earlier, citations are given unless an exception is mentioned. A few non-Hippocratic medical terms are included, on evidence from other sources.

<sup>8</sup> Cf. Psichari, *op. cit.* 104, who adduces examples of this expression and other similar expressions in the *Corpus*.

<sup>9</sup> The Aeschylean use is of the spine of fish, a sense in which the word is used by Democritus (Diels<sup>5</sup> B 151). Herodotus (4.52) once uses the word of the spine of man.

<sup>10</sup> Sophocles coined a poetic equivalent for this verb and expressed by it a medical idea found in the *Corpus*: *ἀμβλυφαεῖ δ' ὄμμ' ὑπὸ γήρως Fr.* 647.

ἀνακλᾶω E. Or. 1471. Compare the medical usage of ἀνάκλασις "flexure," as well as the verb, in the *Corpus*: Art. 2, 78; Fract. 2, 13, etc.<sup>11</sup>

ἀνώδυνος S. Aj. 554<sup>b</sup>; Ph. 883. This word is extremely rare except in the *Corpus*, where it occurs very commonly. Thus, Hp., Acut. 4 bis; Art. 8, 9, 13, etc.; Prog. 7 quater; Epid. 1.1 *passim*.

ἀποκαυλίζω "fracture straight across," E. Supp. 717. Found only here and once in Thucydides<sup>12</sup> (2.76), this term is used in the *Corpus* of a certain type of fracture: cf. Art. 14, 32, 33; Fract. 45. The uncompounded root also produced several technical terms in medicine.

ἄργεμον "albugo," S. Fr. 233. This is the only occurrence of the word except in medicine. The meaning of this medical term is established by Erotian Gloss. Hippocr. (47.11 Nachmanson): πάθος τι περὶ τοὺς ὀφθαλμοὺς λευκωματῶδες (cf. Hesych. 1.272.28). It is used in the *Corpus*, Loc. Hom. 13, and in later medical literature.

ἄρθρον "joint," "socket," S. Tr. 769, 779; Ph. 1202, 1208; E. Tro. 1179; Bacch. 1300; El. 842.<sup>13</sup> Used once by Empedocles (Diels<sup>5</sup> B 17.22) and very frequently in the *Corpus*: Aph. 3.31; Art. 1, 45; Prog. 24; Fract. 37; Epid. 1.9; Aër. 15.

ἀρτηρία "bronchial tube." πλεύμονός τ' ἀρτηρίας S. Tr. 1054. Cf. ἀρτηριῶν κίνησις Democritus (Diels<sup>5</sup> B 120); Anaxagoras (Diels<sup>5</sup> B 10); and Hp. Art. 45, 69, etc.<sup>14</sup>

ἀρχαία φύσις A. Cho. 280 (of the flesh consumed by a λειχήν). Cf. Hesychius (1.294.75): ἡ πρὸ τοῦ νόσέιν κατάστασις (παρὰ Ἴπποκράτει). Very similar is Erotian, Gloss. Hippocr. (41.15 Nachmanson). The expression is common in the *Corpus*: Art. 13, 16, 37, 53, 70; Epid. 2.1.6; Aër. 8.

διαμυδαίνω A. Fr. 54a (Smyth).<sup>15</sup> Though the word is not recorded elsewhere, for its meaning compare διαμυδάω Hp. VC 21 and the medical usage of διαμύδησις "mortification."

<sup>11</sup> Also once in Theopompus Com., and in Thucydides, but in a different sense.

<sup>12</sup> Thucydides also employed a number of medical terms because of Hippocratic influence. Cf. the list given by W. Nestle, *op. cit.* (see note 3) 29.

<sup>13</sup> This word does not occur in Homer or Aeschylus, nor earlier than the citations above. It is also used several times in the general sense of "limb" by the two Tragedians, as well as in the *Corpus*.

<sup>14</sup> On the development of the meaning of the word, cf. Jebb's note in the Appendix to his *Trachinians* (199f.).

<sup>15</sup> *AJPh* 41 (1920) 105f.

δυσθυμία "state of depression." *τίκτονσι γάρ τοι καὶ νόσους δυσθυμίας* S. Fr. 663.<sup>16</sup> This word recurs commonly in the *Corpus*, especially in the case-histories of *Epidemics* 1 and 3: *VM* 10; *Aph.* 6.23; *Epid.* 1.18; *Epid.* 3.1.5, 3.1.14, 3.17.14.

ἐλκώδης "ulcerated," E. *Hipp.* 1359. Used technically in Hp. *Epid.* 3.7; *Acut.* 54.

ἔμβρυον "foetus," A. *Eum.* 944. In this sense the word is common in medicine: Hp. *Aph.* 5.31, 52; *Morb. Sacr.* 8; *Aër.* 7; *Alim.* 7. Also used by Antipho Soph. (Diels<sup>5</sup> B 36).

ἔμμοτος A. *Cho.* 471 (the only use except in medicine). A technical term meaning "dressing with lint" for a wound. Both this and *μοτός*, from which it was formed, and many derivative words, are common in medicine. Cf. Hp. *Aph.* 5.47; *Art.* 49, 50 *bis*, 55; *Mochl.* 36, etc.

ἔμπος "suppurating." *τήνδε τ' ἔμπουν βάσιν παύσοντος ἄλγους* S. Ph. 1378. This and many other terms from this root were used technically in medicine. Cf. Hp. *Prog.* 7, 17, 18, 23; *Acut.* 14; *Aph.* 5.10, 15; *Art.* 40, 49, etc.

ἐξαμβλῶ "miscarry." *νηδὺν ἐξαμβλοῦμεν* E. *Andr.* 356. This word seems to have been peculiarly Attic,<sup>17</sup> the common Hippocratic word being *ἐκτιτρώσκω*. There is no parallel in the *Corpus* except in the later treatises.

ἐπάργεμος "with a film over the eye." *σήματα ἐξωμμάτων ἐπάργεμα* A. *Pr.* 499.<sup>18</sup> Used again by Aeschylus in *Ag.* 1113 and *Cho.* 665. Cf. Pollux (2.65) *s.v.* ἄργεμος: καὶ ὁ τοῦτ' ἔχων ἄνθρωπος ἐπάργεμος. The word was formed from ἄργεμον (cf. *supra*). The first extant technical use in medicine is in Aristotle (*Hist. An.* 609<sup>b</sup>16, 620<sup>a</sup>1).

ἐπιλαμβάνω "to attack" (of a disease). *ἐπέληπται νόσῳ* S. *Ant.* 732. Cf. Hp. *Aph.* 5.5, 6.51; *Morb. Sacr.* 9, 12; *VC* 13, 19; *Art.* 49, etc.<sup>19</sup>

ἱάμα "remedy," A. *Fr.* 385 N. Cf. Hp. *Acut.* 6; *Mochl.* 37; *Alim.* 50.

ἱάσιμος (φαρμάκοις) A. *Pr.* 475; E. *Or.* 399. Cf. Hp. *Morb. Sacr.* 11, etc.

<sup>16</sup> Three times in Euripides in a more general sense.

<sup>17</sup> Cf. Phrynichus, 288 Rutherford. Aristophanes used the word in *Nub.* 137.

<sup>18</sup> The scholiast on *PV* 499 says: τὰ λευκωματισθέντα. For the use of ἐξωμμάτω cf. S. *Fr.* 710: ἀντί γὰρ τυφλοῦ ἐξωμμάτῳ . . . κόρας. The word, however, is not illustrated in medicine.

<sup>19</sup> The word occurs also in the same sense in Herodotus and Thucydides, and once again, in a different sense, in Tragedy.

ἰασις S. *OT* 68; *El.* 876. Very common in the *Corpus*: *Aph.* 2.17; *Aër.* 22; *Fract.* 4; *Morb. Sacr.* 1, 2, but not elsewhere in fifth century literature.

ἰατρέω E. *Fr.* 917 N. Otherwise restricted to medicine: cf. *Hp. Art.* 46; *Acut.* 2, 72, etc.<sup>20</sup>

ἰσχναίνω "reduce a swelling." σφριγῶντα θυμὸν ἰσχναίνει A. *Pr.* 382. Cf. *Eum.* 267; E. *Or.* 298. This word is extremely common in the *Corpus*: e.g., *Aph.* 5.22, 25; *Art.* 50, 81; *Fract.* 21.

καίω "to cauterize," in surgery. κέαντες ἢ τεμόντες A. *Ag.* 849. The same expression recurs in the *Corpus*: e.g., *Aph.* 6.27, 7.45; *Aër.* 11; *Art.* 40, 50.

κατισχναίνω A. *Pr.* 271; *Eum.* 138. Cf. *Hp. Prog.* 23.

κουφίζω "alleviate," of a disease. σῶμα κουφισθῇ νόσου E. *Or.* 43. Also *Med.* 473; S. *Ph.* 735.<sup>21</sup> The word is very common in the case-histories of *Epidemics* 1 and 3; also *Aph.* 2.27.

λειχήν "skin eruption." λειχήνας ἐξέσθοντας<sup>22</sup> ἀρχαίαν φύσιν A. *Cho.* 281. Cf. *Eum.* 785. The word is used of a form of scurvy in the *Corpus*: *Aph.* 3.20; *Alim.* 20; *Prorrh.* 2.43.

λιποψυχεῖν S. *Fr.* 496. For the medical use of the noun, cf. *Hp. Aph.* 7.8; of the adjective, *Acut.* 42.

μεγαλόσπλαγχνος E. *Med.* 109. The word occurs nowhere else except *Hp. Epid.* 3.17.ιγ; *Acut.* 50, 53, where it is used technically. The Euripidean usage is metaphorical.

νοσερός "diseased," E. *Or.* 1016; *Hipp.* 131, 179. The word is rare except in the *Corpus*: *Aph.* 7.67; *Art.* 50, etc.; *Aër.* 3, 6, 10, 14; *Morb. Sacr.* 5.

νωτιαῖος "spinal." νωτιαῖα ἄρθρα E. *El.* 841. The only other early uses are found in Diogenes (Diels<sup>5</sup> B 6) and the *Corpus*: *Aph.* 5.18; *Art.* 45, 47; *Alim.* 7.

ὀσφυαλγής "suffering from lumbago." ὀσφυαλγοῦς γέροντος A. *Fr.* 361 N.<sup>23</sup> Cf. *Hp. Coac.* 154, 313, 606.

παρηγορία A. *Ag.* 95. παρηγορέω A. *Eum.* 509. The noun is

<sup>20</sup> There are several poetic variants from this stem: ὁ χειροτέχνης ἰατροίας S. *Tr.* 1001; ἱατῆρ S. *Tr.* 1209; ἱατρόμαντις A. *Supp.* 263; *Ag.* 1623; *Eum.* 62.

<sup>21</sup> There are other uses of the word in Sophocles and Euripides, without medical force.

<sup>22</sup> With the use of this verb, compare κατεσθίει *Hp. VM* 19; διεσθίει *Hp. Morb. Sacr.* 14.

<sup>23</sup> In the same fragment and context, ὀδυνοσπᾶς (not found elsewhere) seems to be a purely poetic variant.

found in Hp. *Epid.* 3.17.4; the verb, Hp. *Hum.* 1; *Acut.* 58; the adjective, Hp. *Acut.* 62, 66; *Aph.* 5.22.<sup>24</sup>

πυρέσσω E. *Cyc.* 228. This and other formations from the root occur with great frequency in Hippocrates: e.g., *Prog.* 16, *passim*, the noun particularly in *Epidemics* 1 and 3.

ράφή "suture." ραφάς ὀστέων E. *Ph.* 1159, cf. *Supp.* 503. Extremely common in the *Corpus*: e.g., *VC* 1 (five times), 3, etc.

σπασμός "convulsion." <sup>25</sup> βρυχώμενον σπασμοῖσι S. *Tr.* 805, cf. *Tr.* 1082 (the only occurrences in Tragedy; once in Thucydides and Herodotus). Used very frequently in medicine: Hp. *Aph.* 2.26, 5.25; *Aēr.* 3; *Epid.* 1.6, 12; *Prog.* 24.

συνισχναίνω E. *IA* 694. Cf. Hp. *Morb. Sacr.* 5, 8, 11.

σφακελισμός "convulsion." E. *Fr.* 751 N. The word occurs in Hp. *Art.* 33, 50 *bis*, 86; *VC* 17; *Fract.* 11, etc.

σφάκελος "convulsion." κατὰ δ' ἐγκέφαλον πηδᾷ σφάκελος E. *Hipp.* 1352. Cf. A. *Pr.* 878, 1045, cf. σφακέλους τοῦ ἐγκεφάλου Hp. *Aēr.* 10, etc.; *Aph.* 7.78, etc.

σφόνδυλος "vertebra," E. *El.* 841; *Ph.* 1413. Cf. Hp. *Aph.* 3.26; *Art.* 41, 45, *passim*.

τέμνω "to use the knife," in surgery. κέαντες ἢ τεμόντες A. *Ag.* 849.<sup>26</sup> Cf. τεμών χροά E. *Fr.* 1072 N.<sup>27</sup>

τομή "use of the knife," in surgery. τομαῖς ἀφαιρεῖν ἢ ποτοῖσι E. *Fr.* 403 N. Cf. the Hippocratic use in *Art.* 62; *VC* 13.

φαγέδαινα "cancerous sore." <sup>28</sup> φαγέδαιν' αἰέ μου σάρκας ἐσθίει ποδὸς A. *Fr.* 253 N. The word is literally used by Aeschylus in his *Philoctetes* in a line later repeated by Euripides (*Fr.* 792 N) with change of verb. For the medical usage, compare Hp. *Aēr.* 10; *Hum.* 20. The verb φαγεδαινόμαι, as well as other formations from the root, occurs in medicine.

φαρμακεύω E. *Andr.* 355. Cf. Hp. *Art.* 67; *Aph.* 4.1, 4.12; *Fract.* 11.

<sup>24</sup> The word occurs several other times in Tragedy in a general sense.

<sup>25</sup> σπαραγμός is used as a poetic equivalent. ἐκ ποδῶν δ' ἄνω ὑπέρχεται σπαραγμός εἰς ἄκρον κᾶρα A. *Fr.* 169. διώδυνος σπαραγμός πλευμόνων ἀνθήψατο S. *Tr.* 778. cf. 1254. Here the word is plainly medical in content, though it does not occur in medical literature. In the same manner, ἀπολακτισμοὶ βίου A. *Supp.* 937.

<sup>26</sup> For Hippocratic illustrations, see under καίω *supra*.

<sup>27</sup> The expression τομῶντι πῆματι S. *Aj.* 582 is clearly medical in content, but the use of the verb cannot be paralleled in medicine.

<sup>28</sup> Sophocles uses a number of poetic equivalents for the medical idea in φαγέδαινα: ἀδηφάγον νόσον *Ph.* 313; διαβόρος νόσος *Tr.* 1083, cf. *Ph.* 7; βαρυβρῶτ' (sc. νόσον) *Ph.* 694; βρύκομαι *Ph.* 745, cf. *Tr.* 987.

χολή "gall," "bile." προσέστη<sup>29</sup> καρδίας κλυδώνιον χολῆς A. *Cho.* 184. δοχαὶ χολῆς E. *El.* 828. πικρὰν χολήν S. *Fr.* 854. Cf. E. *Fr.* 682 N. For the medical uses, cf. Hp. *VM* 19; *Aër.* 10; *Aph.* 4.23.<sup>30</sup>

φλέψ κοίλη "cava vena," E. *Ion* 1011. For this technical term, compare Hp. *Morb. Sacr.* 6, 10; *Vict.* 1.9. The simple φλέψ occurs in A. *Fr.* 230 N and S. *Ph.* 825. Cf. Democritus (Diels<sup>5</sup> B 135), and constantly in Hippocrates.

In a second group have been collected words for which a status as semi-technical medical terms seems justifiable. These are of several types. Some are apparently technical in meaning, though parallels cannot be adduced from the earlier treatises of the *Corpus*, but only from later treatises (of uncertain date) and from Aristotle. Others may be found in early medical literature but not extensively enough to warrant for them a technical status. Some few occur in a technical sense in medicine and in Tragedy, but are also extant in other literature in a medical or non-medical sense. If full evidence were available, many of these words would perhaps be found to be technical.

αιονάω A. *Fr.* 425 N. The lack of a context makes uncertain the exact interpretation of the word. It is rare, occurring only here and in the later Hippocratic treatises: *Nat. Mul.* 44; *αἰόνησις Liq.* 1.

ἀκανθώδης (ράχης) E. *Fr.* 849 N. This expression recurs only in Aristotle, *Hist. An.* 516<sup>b</sup>20, 22, etc.

ἄκος. The Tragedians use the word commonly in metaphors as "cure" or "remedy." In four places it takes on the pharmacological significance of the potion compounded as a medical remedy. Thus, τούτων ἄκη τομαῖα καὶ λυτήρια A. *Supp.* 268; cf. *Ag.* 17; *Cho.* 539; E. *Andr.* 121. This is not the commonest word for "remedy" in the *Corpus*, but it does occur: e.g., *Fract.* 30; *Mochl.* 21; *Hum.* 1, 20, etc.<sup>31</sup>

ἄλγημα S. *Ph.* 1170, cf. 340; E. *Fr.* 507 N. The word occurs only here in fifth century literature, except in the *Corpus*, where it is very common: e.g., *Aph.* 3.17; *Acut.* 19; *Epid.* 1.15, 26, etc.<sup>32</sup>

<sup>29</sup> George Thomson, *Oresteia*, ad loc., cites some later instances of the use of προσίστασθαι especially of the rising of the gorge.

<sup>30</sup> The Tragedians also use the word as "anger."

<sup>31</sup> There are several poetic variants formed from this root. Thus, ἄκσμα A. *Pr.* 482; ἀκείτωρ E. *Andr.* 900; ἀκείτρον S. *Fr.* 480; *Ich.* 317; ἀκείφόρος E. *Ion* 1005.

<sup>32</sup> As a poetic variant, ἄλγησις S. *Ph.* 792.



ἀλέξημα A. *Pr.* 479 (the only classical use). The specific medical content is made more concrete by the addition of the adjectives βρώσιμον, χριστόν, πιστόν defining its forms. Cf. Hp. *Mul.* 2.212; ἀλεξητήρια Hp. *Acut.* 54; ἀλέξασθαι *Reg.* 1.

ἀμβλίσκω "cause to miscarry," S. *Fr.* 132. Hesychius glosses the word (which is not found elsewhere until Plato) with ἐξαμβλόω and the Hippocratic word ἐκτιτρώσκω.<sup>33</sup>

ἄναρθρος "without joints," S. *Tr.* 1103; E. *Or.* 227; *Fr.* 557 N. Cf. the Hippocratic use in *Aër.* 19, 24.

ἀνθέω, of disease.<sup>34</sup> A. *Cho.* 1009. ἤνθηκεν (*sc.* νόσος) S. *Tr.* 1089. ἀκήλητον μανίας ἄνθος S. *Tr.* 998. In these places the word occurs with a significance which may be paralleled in the *Corpus*: e.g., *Morb. Sacr.* 8; *Epid.* 1.25; *Hum.* 8. ἄνθος "eruption," Hp. *Coac.* 416 (also, ἐξανθέω and ἐξάνθημα frequently).

ἀπεράω A. *Ag.* 1599. This verb had later medical usages, and other compounds of ἐράω, which does not occur, especially ἐξεράω, are found in medicine (e.g., Hp. *VC* 15; *Morb.* 4.49).

ἄση "nausea." ἔπαυσε καρδίαν ἄσης E. *Med.* 245. Cf. ἄση περὶ τὴν καρδίαν Hp. *Epid.* 7.10; *Aph.* 5.61; *VM* 19; *Epid.* 3.17. ἕ, ξ.<sup>35</sup>

ἀσφάδατος "without convulsion," A. *Ag.* 1293; S. *Aj.* 833. On this term, the scholiast says: ἀσκαρίστω καὶ σπασμόν μὴ ἔχοντι. σφαδάζειν δὲ ἔλεγον τὸ σπᾶσθαι καὶ σφακελίζειν and quotes *Fr.* 1020 N of Euripides. Cf. σφαδάζω *infra*.

ἀφρώδης "foamy." στόματος ἀφρώδης πέλανος E. *Or.* 220. The adjective occurs in Hp. *Prog.* 18; *Aph.* 5.13; *Acut.* 53; *Coac.* 402.

διαῖσσω "pierce." διήξε πλευρῶν (*sc.* σπασμός) S. *Tr.* 1082. Cf. E. *Hipp.* 1351. Though this word occurs three times in Tragedy without medical significance, here it has the same meaning as in Hp. *Morb.* 1.5.22; *Mul.* 1.35.

διαρροή. The word is found only twice, in Euripides, who uses it in anatomical description: πνέυματος διαρροάς *Hec.* 567; cf. *Fr.* 983 N.

διάστροφος "distorted," of the eyes. διάστροφον ὀφθαλμόν S. *Tr.* 794; διαστροφούς ἐλίσσει κόρας E. *HF* 868; *Bacch.* 1122, cf. 1166; *HF* 932. In the diagnosis of epilepsy, τὰ ὄμματα διαστρέφονται is stated

<sup>33</sup> S. *Fr.* 1000 furnishes a word ἀμβλουχία "abortion," found nowhere else. Photius (Reitzenstein 89.14) glosses it with ἀμβλωσις, a term used by Aristotle.

<sup>34</sup> In a general significance both the verb and the noun are of course common in Tragedy.

<sup>35</sup> The word occurs in a milder sense several times in Tragedy and in lyric poetry.

as one of the symptoms (Hp. *Morb. Sacr.* 10 *bis*; cf. *Aph.* 4.49; Arist. *Prob.* 960<sup>a</sup>13, and διαστροφή ὀμμάτων, Arist. *Prob.* 958<sup>a</sup>6).<sup>36</sup>

δυσθεράπευτος S. *Aj.* 609. The word is rare, but found in a later medical treatise (Hp. *Medic.* 10). The verb θεραπεύω was common in medicine: e.g., Hp. *Aph.* 6.38; *Fract.* 11, etc.<sup>37</sup>

δυσίατος A. *Ag.* 1103; E. *Med.* 520. Cf. Hp. *Art.* 14.

ἐκθνήσκω S. *Tr.* 568. This rare word occurs only here and in later Hippocratic treatises (e.g., *Epid.* 5.42).

ἐκπνοή "exhalation," of death, E. *Hipp.* 1438. The term was later commonly used as opposed to ἀναπνοή and εἰσπνοή. So Hp. *Epid.* 6.6.1; Arist. *Sens.* 436<sup>a</sup>15; *Resp.* 471<sup>a</sup>8.

ἐλατήριος. καθαρμοῖσιν ἐλατηρίους A. *Cho.* 968. Compare the Hippocratic ἐλατήρια φάρμακα A. *cut.* 2; *Epid.* 5.7.

ἔλκος "ulcer." θερμοτάταν αἰμάδα κηκιομένην ἐλκείων S. *Ph.* 695. Cf. S. *Ant.* 972; E. *Tr.* 1232; *Fr.* 1086 N. The word is of course extremely common in this sense in the *Corpus*: *Art.* 63; *Aër.* 4, 7; *Fract.* 25, *passim*.<sup>38</sup>

ἐλκώ E. *Hec.* 405.<sup>39</sup> Very common in medicine: Hp. *Aër.* 22; *VM* 19; *Prog.* 23, etc. ἐλκαίνω "fester" is found only in A. *Cho.* 843.

ἐμέω. ἐμοῦσα θρόμβους A. *Eum.* 184, cf. 730. The word is Homeric and perhaps became common. It occurs frequently in the *Corpus*: *Epid.* 1.26.έ, etc.; *Art.* 31, and produced many technical terms.

ἐμπίπτω. πρὶν ἐμπεσεῖν σπαραγμόν S. *Tr.* 1253, cf. *Ph.* 699. Quite common in medicine: Hp. *Aër.* 7; *Aph.* 4.46; 4.80; *Morb. Sacr.* 20.

ἐνθροος "malignant." ἐνθρόου ποδός (sc. ἐλκείων) S. *Ph.* 698. Cf. τεθρωμένον ἔλκος Diosc. 3.9.3 and Thphr. *Char.* 19.3, of an ulcer becoming malignant.<sup>40</sup>

θρόμβος "clot." θρόμβον αἵματος A. *Cho.* 533, cf. 546; *Eum.* 184. This word is rare except in the Hippocratic *Corpus*: *Aph.* 4.80, 7.39; *Morb.* 2.75 and frequently in the later treatises.

θρομβώδεις ἀφροί S. *Tr.* 702. Cf. Hp. *Aph.* 4.69.

κατάστασις "natural condition," used with reference to the

<sup>36</sup> The same symptom is described poetically by A. *PV* 882: τροχοδινείται δ' ὀμμαθ' ἐλίγδην.

<sup>37</sup> θεραπεύω in a medical sense and other words from this root are common in medicine, but oddly lacking in Tragedy. Aeschylus has no word from this root; Sophocles uses only the verb once; Euripides has the verb several times as well as other formations, all without medical significance, except possibly E. *Hipp.* 186.

<sup>38</sup> Used metaphorically, it occurs in A. *Ag.* 640 (cf. ἐλκοποιά A. *Sept.* 398); S. *Ant.* 652. The word in the sense of "wound" occurs in Homer.

<sup>39</sup> Metaphorically, in E. *Alc.* 878; *Supp.* 223.

<sup>40</sup> Cf. A. E. Taylor, *CR* 45 (1931) 172 on the use of the word as "verminous," with a literal medical sense, in A. *Ag.* 562.

ὀμμάτων, E. *Med.* 1197. This significance of the word may be paralleled by *κατάστασις τοῦ χρώματος καὶ τοῦ σώματος* Hp. *Prorrh.* 2.4.<sup>41</sup> κλύζω "purge." *πικρῶ πικρὰν κλύζουσι φαρμάκῃ χολήν* S. *Fr.* 854. Cf. E. *Hipp.* 654; *IT* 1193. Cf. Hp. *Acut.* 19.

κοῖλον "cavity" of the body. *τὰ κοῖλα γαστρός* E. *Ph.* 1411. This sense of the word is common in the later Hippocratic treatises (*Epid.* 5.48; *Mul.* 2.119; *Nat. Mul.* 9) and in Aristotle.

κρυμός "chill." *κρυμός αὐτῆς πλευρὰ γυμνάσει χολῆς* E. *Fr.* 682 N. *κρυμὸν φέρων γνάθοισιν ἐξ ἀμφημέρου* S. *Fr.* 507. The word was perhaps used by Democritus once (Diels<sup>5</sup> A 152) and in the *Corpus: Morb.* 4.53.

κῶμα "foetus," A. *Eum.* 659; E. *Fr.* 106 N. Cf. A. *Cho.* 128. Here may be mentioned also κύω, E. *Fr.* 207 N and ἐγκύμων, E. *Tr.* 11.

λευκάς κόρσας A. *Cho.* 282. This expression refers to the hairs growing upon the skin attacked by a form of leprosy called λέυκη. Thus, Hp. *Prorrh.* 2.

λήξις "cessation." *λήξιν ὑπόδοσιν τε μόχθων* A. *Eum.* 505. The noun is not illustrated in medicine, though λήγω occurs in a medical context in S. *Aj.* 274; *Ph.* 768 and frequently in the *Corpus*: e.g., *Aēr.* 11; *Epid.* 1.22, etc.<sup>42</sup>

μαλάττω "relieve." *νόσου μαλαχθῆς* S. *Ph.* 1334. So used in Hp. *Epid.* 3.17.5; *Coac.* 380.

μελάγχολος S. *Tr.* 573. The great frequency of μελαγχολία and related words in the *Corpus* (*Aēr.* 10; *Aph.* 3.14, 20, 4.9; *Acut.* 61, etc.) suggests a medical origin for this usage.

μυδῶν σῶμα S. *Ant.* 410, cf. 1008; *OT* 1278. Cf. *σάρξ μυδῶσα* Hp. *VC* 15; *Ulc.* 10.

μυσάττομαι "feel nausea," E. *Med.* 1149. Cf. Hp. *Morb.* 2.48.

νοσηλεία "matter from an ulcer," S. *Ph.* 39. From this stem also are νοσηλεύσας S. *Fr.* 215 and ἀνοσήλευτος S. *Fr.* 264.

ὀστέων ὀδαγμός ἀντίσπαστος S. *Tr.* 770. ὀδαγμός occurs only here, but ὀδαξησμός is found in the *Corpus* (*Aph.* 3.25) as is ὀδάξομαι (used metaphorically by Sophocles in *Fr.* 1127).

παῦλαν νόσου βαρείας S. *Ph.* 1329. ἀνάπαυλα E. *Fr.* 912 N. So used in Hp. *Mul.* 2.124; *Flat.* 9.<sup>43</sup>

<sup>41</sup> εὐφνὲς πρόσωπον E. *Med.* 1198 seems used in the sense in which εὐφνίη "natural excellence" is twice found in the *Corpus: Art.* 82; *Off.* 4.

<sup>42</sup> W. Headlam, *CR* 17 (1903) 286, claims for λήξις a technical status. This view is expanded by G. Thomson, *Oresteia, ad loc.*, who cites numerous passages supporting a medical significance, as also for ὑπόδοσιν. However, none except very late passages can be adduced, and then not very clear examples. The term cannot be shown to be fully technical.

<sup>43</sup> Cf. the poetic πανστήρα νόσου (of Asclepius), S. *Ph.* 1438.

πέπων "assuaged," S. *OC* 437. Cf. Hp. *VM* 19; *Epid.* 6.2.16.

περιώδυνος A. *Ag.* 1448. This word, which occurs only here in poetry, and the verbal and substantive forms from this root are common in the *Corpus*: e.g., *Aph.* 6.10, 7.52; *Acut.* (*Sp.*) 34.

πήμα "sore," "tumor." πήμ' ἀποστρέψαι νόσου (by cautery or surgery) A. *Ag.* 850. ἄκος τομαῖον πημάτων A. *Cho.* 539. Cf. S. *Aj.* 582; *Ph.* 765.

πιμελή S. *Ani.* 1011. The word is very rare, except in the *Corpus*: *Aēr.* 19, 21; *Art.* 41; *Alim.* 7. Also Democritus once (Diels<sup>5</sup> A 13).

πύλαι δὲ καὶ δοχαὶ χολῆς E. *El.* 828. πύλαι is the "portal fissure," and so used in Hp. *Epid.* 2.4.1; *Anat.* 1; Arist. *HA* 496<sup>b</sup>32.

σκαρδαμύσσω E. *Cyc.* 626. Cf. Hp. *Coac.* 77; *Int.* 43; Arist. *Phgn.* 807<sup>b</sup>7.

σκεπρός A. *PV* 102, 488; E. *Fr.* 87 N. The only other uses of the word, until late, are in the *Corpus*: e.g., *Art.* 50; *Mul.* 1.11. The Euripidean fragment is quoted by Erotian in his gloss on the word, *Gloss. Hippocr.* (119.15 Nachmanson).

σπάω "cause convulsion." ἐσπᾶτο πέδονδε καὶ μετάρσιος S. *Tr.* 786. For the medical usage, cf. Hp. *Art.* 67; *Aph.* 5.5.

σφαδᾶζω "to suffer convulsion." δ' δ' ἐσφάδαζεν, οὐκ ἔχων ἀπαλλαγάς E. *Fr.* 1020 N. Cf. Hp. *Mul.* 1.38.<sup>44</sup> The word is equivalent to σπᾶσθαι and σφακελίζειν, according to the scholiast on S. *Aj.* 833.

σφριγᾶω "to be swollen" (of an ulcer at the bursting point), A. *PV* 380.

τέμνω "to shred," of herbs. τέμνειν ἄκος E. *Andr.* 121; ἐντέμνειν ἄκος A. *Ag.* 17; φάρμακα ἀντιτέμνων E. *Alc.* 971; τομαῖον ἄκος A. *Cho.* 539; *Supp.* 267. The usage is pharmacological.

τέρθρον E. *Fr.* 371 N. Erotian, *Gloss. Hippocr.* (126.12 Nachmanson) defines the word and cites the passage of Euripides as an illustration. Cf. Hp. *de mul. aff.* 2.125. The word was also used by Empedocles (Diels<sup>5</sup> B 100.4).

ὑπεμβρύω S. *Fr.* 1127.4. This word does not occur elsewhere.

φαρμασσομένη χρίματος . . . παρηγορίας A. *Ag.* 94. A parallel usage is to be seen in Hp. *Morb. Sacr.* 1.

φαῖλη διαίτη "lean diet," E. *Fr.* 213.4 N. φαῖλος, rare in Aeschylus and Sophocles, is especially Euripidean. The phrase has here the technical sense observed in the *Corpus*: e.g., *Fract.* 36; *Art.* 49, etc. This is the only place (along perhaps with E. *Fr.* 917 N) in which διαίτα attains something of the significance in which it is used very commonly in medicine.

<sup>44</sup> The word in A. *Pers.* 194; S. *Fr.* 848; E. *Fr.* 821 N is not medical.