

DENTITION

INTRODUCTION

OF this short piece Littré¹ says: "Ce très court fragment n'est cité par aucun ancien commentateur, rien ne peut nous faire deviner de qui il est, ni où il a été pris." In his *Argument* he begins: "Cet opuscule est rédigé dans la forme aphoristique, et, tout court qu'il est, il témoigne que l'auteur avait étudié, non sans fruit, l'état des enfants à la mamelle et leurs maladies."²

Adams'³ remarks are very similar: "This little tract is destitute of any competent evidence of its authenticity. Some of the observations contained in it bespeak a familiar acquaintance with the diseases of infancy."

The account in Pauly-Wissowa is even scantier in its information: "ein Blättchen über das Zahnen der Kinder, wie das vorige weder von Galen noch Erotian erwähnt."

In spite of these rather discouraging remarks *Dentition* is a work of no little interest. In the first place it is written in aphorisms, and like most medical aphorisms deals with prognosis rather than treatment. Then again it is curiously short and abrupt, and the reader wonders why it was written in the present form. The answer to this puzzle may

¹ I. p. 415.

² VIII. p. 542.

³ Vol. I. p. 124.

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perhaps become plainer after a discussion of the subject matter of *Dentition*.

It is obvious to any medical man that the tract is divided into two parts, both of which contain propositions apparently irrelevant to the main subject. Roughly speaking, however, one may put the matter thus:

- (1) Propositions I.—XVII. deal with dentition (*ὀδοντοφυΐα*), and incidentally with the suckling and weaning of infants.
- (2) Propositions XVIII.—XXXII. deal with ulceration of the tonsils (*παρίσθμια*), uvula and throat.

Teething and ulcerated throats are not connected, and it may be asked why they are here placed side by side. A short work dealing with both dentition and ulcerated throats is indeed a strange mixture.

It is remarkable that the key-word to most of the first part is *ὀδοντοφυΐα*, while of the second part it is *παρίσθμια*. This suggests that *Dentition* is an extract from a larger collection of aphorisms, which were arranged in a kind of alphabetical order. If the tract consisted only of propositions VI.—XII. and XVIII., XX.—XXVII., XXX.—XXXII., no doubt would be possible; every proposition would contain one or the other of the key-words. But there remain:—

- (a) I.—V., with the key-words *γάλα* and *θηλάζω*.
- (b) XIII.—XVII., with the key-words *οἰρεῖσθαι*, *παράκειται* (?), *παρεσθίω*, *παρηθῶ*, leading on to *παρίσθμια* in XVIII.
- (c) XIX., the key-word of which is doubtful.
- (d) XXVIII., XXIX., the key-words of which are doubtful.

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Now surely ὀδοντ-, οὐρ-, παρα-, παρε-, παρη-, παρι-, must be intentionally set in alphabetical order, and I suggest that a scribe, copying a larger collection of aphorisms, omitted accidentally ὀδοντοφύια to παρίσθμια. This larger collection was arranged alphabetically, and probably dealt with diseases of childhood. When the scribe found out his mistake, he wrote out the omitted portion at the end, and added to it a few other propositions that he had missed. A later scribe, misinterpreting the facts, regarded the appendix as a fresh work, and gave it the not unnatural name *Dentition*. These remarks may be condemned as speculative guesses, but they are guesses to which an interesting parallel is to be found in the Paris manuscript 2255(E). At the end of this manuscript is a piece called περὶ προγνώσεως ἐτῶν. On examining it we find that it is a fragment of *Airs Waters Places*, which some scribe omitted, placed at the end of his volume, and so added a fresh treatise to the Hippocratic collection!

It is not at all unlikely that there are other similar fragments in the Hippocratic collection. Possibly, too, longer works contain fragments inserted by scribes who thought that they had found a suitable place for them. One or two passages, for instance, in *Epidemics I.* strongly suggest by their irrelevance an origin such as I have described.

The language of *Dentition* is in some respects unusual.

Proposition II. βορός. A poetic word(?). See Aristophanes *Peace* 38. ἐλκω, "I drink," seems poetic. See Euripides *Phoen.* 987 (ἐλκειν μαστόν).

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Proposition III. ἐπιναΐσιος is apparently a late word.

Proposition IV. πολλή φέρεται ἡ κοιλίη. εὐπεπτῶ is very rare.

Proposition XII. χειμῶνας ἔχει, if this reading be correct.

Proposition XIV. παρηθῶ, of the bowels being moved.

Proposition XV. ἀναλαμβάνω, of eating.

Proposition XVII. παρηθῶ.

Proposition XXV. ἀσμενίζω. This is apparently a late word.

Proposition XXVIII. ἀναλαμβάνω, of taking food or drink.

Proposition XXIX. εὐτροφῆς (if the reading be correct). It is apparently ἄπαξ λεγόμενον.

The number of strange expressions in so short a piece points to a late date. If *Dentition* be late, it forms an exception to my general statement that the aphoristic style ceased to prevail among medical writers after 400 B.C.

MSS. AND EDITIONS

The manuscripts containing *Dentition* are V, C, E, and Holkhamensis 282.

I have collated V and Holkhamensis 282. In this treatise the two are not strikingly alike; in fact, the close correspondence between the two manuscripts seems to end where they no longer correspond in the order of the treatises, namely after *Eight Months' Child*.

On the other hand, if I may judge from Littré's *apparatus criticus*, V and C (Paris 2146) are almost

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identical, and they also contain the treatises in the same order. It seems quite certain that C is a mere copy of V.

V reads πολὺν in Proposition III. and in others, but πολὺ in V and in XXVIII. (τὰ πολὺν γάλα κ.τ.λ.), although later in the same sentence πολὺ occurs.

The pronominal forms in ὁπ- are the almost universal rule, but in XIX. and XXII. ὁκ- is found.

The scribe regularly omits iota subscript, but in one place (XXX.) iota is written subscript between the -η- and -σ- of τῆσιν ἄλλησιν ὥρησι.

Sometimes, instead of dividing a word between one line and the next, the scribe preferred to write part of the word with a mark of abbreviation. Thus χειμῶνας appears as χειμῶν^ν, δυναμείων as δυναμ^{έν} and θηλάζειν as θηλάζ^ζ. It is quite likely that corruptions have sometimes been caused by systems of abbreviation and contraction.

Examination of *Dentition* as it appears in V confirms my belief that no confidence can be placed in the spelling of even our best manuscripts in the matter of such points as ὁπ- and ὁκ-.

In places the text of *Dentition* is very corrupt. Accordingly, instead of attempting to restore hopeless passages, I have printed the text of Littré between daggers. In the footnotes emendations are mentioned, and in some cases discussed.

I know of no separate editions of the piece, although it is included in the editions of Littré and Ermerins.

ΠΕΡΙ ΟΔΟΝΤΟΦΥΙΗΣ

I. Τὰ φύσει εὐτροφα τῶν παιδίων οὐκ ἀνάλογον τῆς σαρκώσεως¹ καὶ τὸ γάλα θηλάζει.

II. Τὰ βορὰ καὶ πολὺ ἔλκοντα γάλα οὐ πρὸς λόγον σαρκούται.

III. Τὰ πολὺ διουρέοντα τῶν θηλαζόντων ἥκιστα ἐπιναύσια.²

IV. Οἷσι³ πολλὴ φέρεται ἡ κοιλίη καὶ εὐπεπτοῦσιν,⁴ ὑγιεινότερα· ὁπόσοισιν ὀλίγη, βοροῦσιν ἐοῦσι καὶ μὴ ἀνάλογον τρεφομένοισιν,⁵ ἐπίνοσα.

V. Ὅπόσοισι⁶ δὲ πολὺ γαλακτώδες ἀπεμείται, κοιλίη συνίσταται.

VI. Ὅπόσοισιν ἐν ὄδοντοφυΐῃ ἡ κοιλίη πλείω ὑπάγει ἡσσον σπᾶται ἢ ὅτῳ ὀλιγάκις.

VII. Ὅπόσοισιν ἐπὶ ὄδοντοφυΐῃ πυρετὸς ὀξύς ἐπιγίγνεται ὀλιγάκις σπῶνται.

VIII. Ὅποσα ὄδοντοφυεῦντα εὐτροφα μένει καταφορικὰ ἐόντα κίνδυνος σπασμὸν⁷ ἐπιλαβεῖν.

IX. Τὰ ἐν χειμῶνι ὄδοντοφυεῦντα, τῶν ἄλλων ὁμοίων ἐόντων, βέλτιον ἀπαλλάσσει.

¹ σαρκώσεως MSS. : σαρκώσιος Mack.

² ἐπιναύσια V, Holk. 282, C: ἐνιαύσια vulgate: ναυσία Ermerins.

³ οἷσι V: Holk. 282 has δόσοισι in the margin, but οἷσι in the text.

⁴ The form of εὐπεπτοῦσιν arouses suspicion.

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I. CHILDREN who are naturally well-nourished do not suck milk in proportion to their fleshiness.

II. Children with voracious appetites, and who suck much milk do not put on flesh in proportion.

III. Of sucking children those that pass much urine are the least subject to vomiting.

IV. Children that pass copious stools and have good digestion are the more healthy; those that pass stools scantily, and with voracious appetites are not nourished in proportion, are unhealthy.¹

V. Those that vomit copiously milky matters suffer from constipation.

VI. Those who while teething have their bowels moved often are less subject to convulsions than those who have them moved seldom.

VII. Those who while teething are attacked by acute fever seldom suffer from convulsions.

VIII. Those who while teething are lethargic while remaining well-nourished run a risk of being seized with convulsions.

IX. Those who teethe in winter, other things being equal, come off better.

¹ Or, "subject to illness."

⁵ ὑγιεινότερα . . . τρεφουένοισιν omitted by Holk. 282.

⁶ ὀδόσοισι V: Holk. 282 reads ὀκόσοισι with π written over the κ, and so also in other places.

⁷ σπασμὸς V and C: σπασμὸν Littré.

X. Οὐ πάντα τὰ ἐπὶ ὁδοῦσι σπασθέντα τελευτᾷ·
πολλὰ δὲ καὶ διασφύζεται.

XI. Τὰ μετὰ βηχὸς ὁδοντοφυεῦντα χρονίζει.¹
ἐν δὲ τῇ διακεντήσει ἰσχυαίνεται μᾶλλον.

XII. Ὅποσα ἐν τῷ ὁδοντοφυεῖν χειμῶνας ἔχει,
ταῦτα καὶ² προσεχόντως ἡγμένα ῥᾶον φέρει
ὁδοντοφυῖαν.

XIII. Τὰ διουρεῦντα πλέον ἢ διαχωρεῦντα
πρὸς λόγον εὐτροφώτερα.

XIV. Ὅποσοισιν οὐρεῖται μὴ πρὸς λόγον,
κοιλίῃ δὲ πυκνῶς ὥμὸν ἐκ παιδίων παρηθεῖ,
ἐπίνοσα.

XV. Τὰ εὖπνα καὶ εὖτροφα πολὺ ἄναλαμ-
βάνειν³ καὶ παράκειται οὐχ ἱκανῶς διωκημένον.^{†4}

XVI. Τὰ παρεσθίοντα ἐν τῷ θηλάζειν ῥᾶον
φέρει ἀπογαλακτισμόν.

XVII. Τὰ πολλάκις παρηθεῦντα⁵ δίαιμον καὶ
ἄπεπτον κατὰ κοιλίην πλεῖστα τῶν ἐν πυρετῷ
ὑπνώδεα.

¹ χρονίζει Littré: χρονίζειν V and C.

² ταῦτα καὶ is omitted by Ermerins.

³ ἀναλαμβάνει Foes: ἀναλαμβάνειν MSS.

⁴ It is hard to decide whether Holk 282 has διωκημένον or διωκειμένον.

⁵ παρηθεῦντα Foes: παριθεῦντα or παρυθεῦντα MSS.

¹ For this sense of χειμῶν see *e. g.* *Breaths* XIV. τῆς νόσου καὶ τοῦ παρεόντος χειμῶνος, and also Ermerins' note on this passage. The meaning seems to be that during teething stormy "tantrums" on the part of the child are a better sign than a subdued, semi-comatose state.

² Perhaps πρὸς λόγον goes with διαχωρεῦντα, though the order of words is against this. The sense, however, would be improved. "Those who, in proportion, pass more urine than faeces are better nourished." So Littré.

X. Not all children die that are seized with convulsions while teething; many recover.

XI. Teething is protracted when complicated with a cough, and emaciation in such cases is excessive while the teeth are coming through.

XII. Children who have a troublesome time while teething, if they are suitably attended to, bear up more easily against teething.¹

XIII. Those that pass more urine than faeces are proportionately better nourished.²

XIV. Those who do not pass urine in proportion, but from babyhood discharge undigested food frequently, are unhealthy.³

XV. Children who sleep well, and are well-nourished, may take a great deal of food, even though it is placed before them insufficiently prepared for digestion.⁴

XVI. Those that eat solid food while being suckled bear weaning more easily.

XVII. Those that often pass stools of undigested food mixed with blood, the great majority of them when feverish are drowsy.⁵

³ Or, "subject to illness."

⁴ It is fairly certain that the general sense of this proposition is to the effect that children who have healthy constitutions may without harm put a strain upon their digestive organs. But the exact reading is more than uncertain. *παράκειται* is strange, and cannot mean *πάρεστι*, as Littré thinks. But *παράκειται* seems to be the key-word (*παρα-*, with *παρε-* in the next proposition), and so is probably right. Perhaps *εἰ* has fallen out after *καὶ* (the scribe may have thought that *οὐχ* was wrong after *εἰ*), but I can find no parallel to this sense of *διφκημένον*.

⁵ Here too the Greek is strange, and I am not satisfied with the text, though I can offer no better reading. Possibly *τῶν* should be *τούτων* or *έόντα*; possibly it should be omitted.

XVIII. Τὰ ἐν παρισθμίοις ἔλκεα ἄνευ πυρετῶν γιγνόμενα ἀσφαλέστερα.

XIX. Ὅπόσοισιν ἐν τῷ θηλάζειν τῶν νηπίων¹ βῆξ προσίσταται, σταφυλὴν εἴωθε μείζονα ἔχειν.

XX. Ὅπόσοισι ταχέως ἐν παρισθμίοις νομαὶ ἐφίστανται, τῶν πυρετῶν μενόντων καὶ βιηχίων, κίνδυνος πάλιν γενέσθαι ἔλκεα.²

XXI. Τὰ παλινδρομήσαντα ἐν ἰσθμίοις ἔλκεα †τοῖς ὁμοίοισι†³ κινδυνώδεα.

XXII. †Τοῖσι παιδίοισιν ἀξιολόγοις ἔλκεσιν⁴ ἐν παρισθμίοισι, καταπινομένων,⁵ σωτηρίας⁶ ἐστίν, ὅποσα⁷ δὴ⁸ μᾶλλον τῶν πρότερον μὴ δυναμένων καταπίνειν.†⁹

XXIII. Ἐν παρισθμίοις ἔλκεσι, πολὺ¹⁰ τὸ χολῶδες ἀνεμείσθαι ἢ κατὰ κοιλίην ἔρχεσθαι,¹¹ κινδυνώδες.

XXIV. Ἐν τοῖσιν ἐν παρισθμίοισιν ἔλκεσιν ἀραχνιώδεις¹² τι εὖ οὐκ ἀγαθόν.

XXV. Ἐν τοῖσιν ἐν παρισθμίοισιν ἔλκεσι

¹ Ermerins places τῶν νηπίων after ὅπόσοισι.

² Ermerins omits ἔλκεα.

³ ὁμοίοισι (or ὁμοίωσι) MSS. : ὡμοῖσι Calvus : νηπίοισι Cornarius and Ermerins.

⁴ ἀξιόλογοις ἔλκεσιν MSS. : ἀξιόλογα ἔλκεα Ermerins.

⁵ καταπινομένων MSS. : καταπίνειν δυναμένων Ermerins after Linden.

⁶ σωτηρίας ἐστίν MSS. : σωτήριά ἐστι Ermerins.

⁷ The MSS. punctuate before ὅποσα and after χολῶδες in the next proposition. Littré suggested the punctuation in the text and he is followed by Ermerins.

⁸ δὴ MSS. : δέ Ermerins.

⁹ Ermerins punctuates after πρότερον and marks an hiatus after καταπίνειν.

¹⁰ Holk. 282 has τὸ πολὺ.

¹¹ ἔρχεσθαι MSS. : διέρχεσθαι Ermerins.

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XVIII. Ulcers on the tonsils that come without fever are less dangerous.

XIX. Babies that are attacked by a cough while being suckled usually have an enlarged uvula.

XX. When corroding sores form quickly on the tonsils, the fevers and coughs remaining, there is a danger of ulcerations occurring again.

XXI. Ulcerations that recur on the tonsils are dangerous.¹

XXII. When children have considerable ulceration of the tonsils, if they can drink, it is a sign that they may recover, the more so if they could not drink before.²

XXIII. In cases of ulcerated tonsils, to vomit bilious matters, or to evacuate them by stools, is attended with danger.

XXIV. In cases of ulcerated tonsils, the formation of a membrane like a spider's web is not a good sign.³

XXV. In cases of ulcerated tonsils, after the first

¹ The conjecture of Cornarius ("of babies") is most ingenious and may be right. I suspect, however, that τοῖς ὁμοίοις is part of a corrupted gloss on ἰσθμίσις, which some scholiast saw was used in the same sense as (ὁμοίως) παρισθμίσις.

² The most corrupt proposition in *Dentition*. It seems impossible to restore the exact text of the original. One suspects, however, that Ermerins is right in reading ἀξιόλογα ἔλκεα and σωτήριά ἐστι, and that Linden correctly changed καταπινομένων to καταπίνειν δυναμένων. The sense of ὅποσα . . . καταπίνειν is fairly certain, but the Greek to represent it could be written in several ways.

³ It would be interesting if we could interpret this proposition correctly.

¹² Holkamensis 282 omits ἀνεμείσθαι . . . ἀραχνιώδες, the eye of the scribe passing from -ῶδες to -ᾶδες.

μετὰ τοὺς πρώτους χρόνους διαρρεῖν φλέγμα διὰ τοῦ στόματος, πρότερον οὐκ ὄν,¹ χρήσιμον, ὅμως ἀνακτέον· ἦν δὲ ἄρξεται συνδιδόναι,² πάντως ἀσμεριστέον· τὸ δὲ μὴ οὕτως διαρρέον εὐλαβητέον.

XXVI. ῥευματιζομένοις παρίσθμια κοιλὴ κατενεχθεῖσα πλείω³ λύει τὰς ξηρὰς βήχας· παιδίοισιν ἀνενεχθέν τι⁴ πεπεμμένον πλείω λύει.

XXVII. Τὰ πολὺν χρόνον ἐν παρισθμίῳ ἔλκεα ἀνανυξή μένοντα ἀκίνδυνα πρὸ τῶν πέντε ἢ ἔξ ἡμερέων.

XXVIII. Τὰ πολὺ γάλα τῶν θηλαζόντων ἀναλαμβάνοντα ὡς τὸ πολὺ ὑπνώδεα.

XXIX. Τὰ μὴ τεύτροφέα†⁵ τῶν θηλαζόντων ἄτροφα καὶ δυσανάληπτα.

XXX. Ἐλκεα ἐν θέρει γιγνόμενα ἐν παρισθμίῳ χείρονα τῶν ἐν τῇσιν ἄλλησιν ὥρησι· τάχιον γὰρ νέμεται.

XXXI. Τὰ περὶ σταφυλὴν νεμόμενα ἔλκεα ἐν παρισθμίῳσιν, σφωζόμενοισι⁶ τὴν φωνὴν ἄλλοιοί.

XXXII. Τὰ περὶ φάρυγγα νεμόμενα ἔλκεα χαλεπώτερα καὶ ὀξύτερα ὡς ἐπιπολὺ δύσπνοιαν ἐπιφέρει.

¹ ὄν MSS. : ἰδὼν Ermerins. Perhaps ἔδον.

² ἄρξεται ξυνδιδῶ MSS. : ἄρξεται καὶ ξυνδιδῶ Mack : ἄρξεται ἦν ξυνδιδῶ Ermerins : ἄρξεται ξυνδιδόναι Littre : ἄρξεται συνδιδόν would be nearer the MSS.

³ Ermerins omits πλείω.

⁴ Ermerins omits παιδίοισιν and reads ἀνενεχθέν δέ τι. V has τι.

⁵ εὐτροφέα MSS. : εὐτροφα Ermerins.

⁶ Before σφωζόμενοισι V, Holk. 282 and C have γῆν, but read παρισθμίῳσι, not παρισθμίοισιν. Possibly γῆν has arisen from the -ιν.

periods it is useful for phlegm to flow from the mouth, which before did not do so; nevertheless it must be brought up. If the symptoms begin to disappear, it is altogether a welcome sign. If the phlegm does not flow in this way, you must be careful.¹

XXVI. When there is a discharge on the tonsils, in most cases dry coughs are resolved by evacuation through the bowels; with children most cases are resolved by the vomiting of concocted matters.

XXVII. Ulcerations on the tonsils, that remain for a long time without increasing, are not attended with danger before five or six days.²

XXVIII. Children at the breast that take much milk are generally drowsy.

XXIX. Children at the breast that are ill nourished³ also pick up strength with difficulty.

XXX. Ulcerated tonsils that occur in summer are worse than those that occur at other seasons, for they spread more rapidly.

XXXI. Ulcers on the tonsils that spread over the uvula alter the voice of those who recover.

XXXII. Ulcers that spread about the throat are more serious and acute, as they generally bring on difficulty of breathing.

¹ The readings *ὄν* and *συνδιδόναι* are uncertain, but the sense is quite clear.

² Littré points out that it is difficult to fit in *πολὸν χρόνον* with *πρὸ τῶν πέντε ἢ ἐξ ἡμερέων*. I agree with him, and believe that the first phrase is a gloss on the second.

³ The word *εὐτροφία* can scarcely be right; it should be *εὐτραφία* or *εὐτροφα*. But even when it is corrected it is otiose with *ἄτροφα*. I suspect that there were once two readings (the Hippocratic collection has hundreds of such slight variations), namely, *τὰ μὴ εὐτραφία τῶν θηλαζόντων καὶ δυσανάληπτα* and *τὰ ἄτροφα τῶν θηλαζόντων καὶ δυσανάληπτα*. At some time these two versions were combined into one.