Appendix

Materials, Sutures, Plugs, ‘Tents’, etc.

Ankter (ἀγκτήρ)

Was an ankter a type of suture or a metal clasp? Celsus seems to promote the idea of the latter when he unites a gaping flesh wound, not with sutures (sutura), but with fibulae which he says the Greeks call ankteres (5.26.23B).1 Ordinarily, one understands fibula as designating a metal clasp, pin or buckle; so received opinion has inclined to see Celsus’ fibula as something of that nature arranged in such a way as to close a lesion, perhaps fixed in place by a thread.2

Greek sources, often overlooked, would seem to resolve the issue decisively against fibula/ankter in this sense. Like Celsus, authorities such as Galen and Paul frequently cite sutures (rhaphai/rhammata) and ankteres in conjunction.3 Perhaps the similarity of language in all three authors has had the effect of transferring to Greek terminology assumptions already reached by many about the nature of Celsus’ fibula, i.e., that the ankter was a metal pin. However, three texts in Oribaisus’ Collectiones Medicæ show clearly that an ankter was no such thing.

Book 44, chapter 7 deals with drainage of an intercostal abscess or empyema. Early in the operation this directive is given:

Let the skin first be cut, and before the abscess is opened pass four ankteres of suture thread through the lips of the incision, two and two.4

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1 ... sutura quidem aliena est: inponendae vero fibulae sunt (anctera Graeci nominant) ...
2 See: Johnston-Horsley, Galen, Method of Medicine (2011) Loeb I, 391 “a type of pin”; Boudon, in Galien, Art Médical, in Galien vol. 11, Bude series, (2000) 366 “agrafes”; Drabkin, Caelius Aurelianus, On Acute Diseases, On Chronic Diseases (1950) 666 “surgical pins”; and Spencer, Celsus, De Medicina (1938) Loeb 11, List of Surgical Instrument, etc., p. lxi: “Fibula, Greek ἀγκτήρ, originally a brooch, safety pin, was used by Celsus of pins passed through the margins of wounds and fixed by a thread twisted round them in a figure of 8...” Milne (1907) 163 was undecided but leaned to clasp. Helmbold, Plutarch, Moralia 468C (1939) translated fibula as “clips for wounds”, citing Milne. At 7.25.2 Celsus describes a fibula used to to promote the voice and health of adolescent boys. This certainly is a pin/clasp, as is the fibula aenea mentioned by Columella for puncturing and scratching lines in animal tissue (On Agriculture 6.5.4 & 6.17.4).
4 τεμνόεις δὲ πρῶτον μὲν τὸ δέρμα, καὶ πρὸ τῆς τοῦ ἀποστήματος στομίσεως διὰ τῶν τῆς διασφάλεως χειλῶν ἀγκτήρες ῥαμμάτινοι διεκβάλλεσθωσαν τέσσαρες, δύο καὶ δύο... Αἰτίου 7.85.15 = Hirschberg, Waugh pp. 122–123. Chp. 85 (growths on eylids) may also be cited: “next treat/cure
The purpose of the *ankteres* in this case is to hold in place dressings. Clearly thread, not pins are at issue here. The *ankteres* are later cut through and removed.5

In book 48, chapter 28, the topic shifts to bandages. One type, called ‘Split Bandage for Eyes’ requires three bands of cloth wrapped about the head. All are called *telamon*, a term also used by Greeks for tourniquet (see above under Miscellaneous and Parasurgical Items). To construct the bandage the bands are maneuvered and knotted. In the course of the process the ends of the narrowest of the bands, which had initially been positioned at the crown of the head, are interchanged (perhaps crossed) under the chin to anchor another band. This narrowest band is referred to as an *ankter*:

After [another band] has been knotted, the ends of the oblique [narrowest] band (this is called *ankter*) are interchanged, so that by the interchange of its ends, the [other] band is, as it were, secured by being tied in place.6

At the end of the process “the ends of the *ankter* are bound to one another at the crown of the head.”7

Again, in chapter 35 of the same book we encounter a bandage called ‘Lip Guard of Heliodorus.’ As in chapter 28, the procedure begins with a band (*telamon*), this time unspecified as to size, called *ankter*, which is again positioned initially at the crown of the head (ἀγκτῆρα δεῖ τάξαι κατὰ τὸν τῆς κορυφῆς τόπον . . .) and coordinated with another (narrow in this case) *telamon*. In similar language, the ends of the *ankter* are knotted and tied together at the end of the process.

The last passage of interest is the account of gastrorrhaphia (stitching up the abdomen on horses) in *Hippiatrica Berolinensia* (71.1.3–8 [Apsyrtus]). The procedure, we are told, is the same as for humans: stitch with a woven thread of wool, not too fine. Pick out the ends; then bind the fat and hide with an *ankter* consisting of a cord of waxed hemp . . . on the seventh day remove the *gastrorrhaphia* and take out the stitching.8

By chance the process of gastrorrhaphia is also raised by Scribonius Largus in his chapter on “The Green Plaster of the Surgeon Glycon” (*Comp*. 206). This plaster, he

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5 οἱ ἀγκτῆρες διακοπτόμενοι κομιζέσθωσαν.
6 μετὰ δὲ τὸν ἄμματισμὸν ἐναλλάσσονται αἱ ἀρχαὶ τοῦ πλαγίου τελαμώνος (λέγεται δ᾿ οὗτος ἀγτήρ) ἵνα τῇ τῶν ἀρχῶν ἐναλλαγῇ ὡς ὑπὸ τοπικοῦ ἄμματος κρατηθῆ ὁ τελαμὼν.
7 ἐπὶ τέλει δὲ τοῦ ἀγκτήρος αἱ ἀρχαὶ κατὰ τὴν κορυφὴν πρὸς ἄλληλας διαδέονται.
8 δεῖ . . . ράμματι ἐφέξει κεκλωμένῳ μὴ λεπτῷ, καὶ ἐκλαμβάνειν τὰς ἀρχὰς ἑξώ, ἀγκτηριάζειν τὴν πιμελῆν καὶ τὴν βύρσαν σφηκώματι κανναβίνῳ κεκηρωμένῳ . . . ἐβδομαίου δὲ γενομένου, λύειν τὴν γαστρορραφίαν καὶ ἔξωπειν τὸ ράμμα.