

Crossing the Borders Between Egyptian and Greek Medical Practice*

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This paper offers a survey of the interrelationship between Egyptian and Greek medical practice in Graeco-Roman Egypt, focusing on the papyri. Magic and religion played a significant role in Egyptian medical practices that remained fairly constant from the Old Kingdom (c. 2600 BCE) until the arrival of Greek practitioners during the Hellenistic period (c. 332–30 BCE). Their arrival introduced changes, but there is evidence that medicine in Ptolemaic Egypt was practiced mainly in the Egyptian style.

Greek Experiences in Early Ptolemaic Egypt

In a letter dated around the middle of the third century BCE, perhaps written in Memphis (so C.C. Edgar), a certain Dromon asks Zenon to order one of his people to buy a *kotyle* (about one-fourth of a litre)¹ of Attic honey (the best honey came to Egypt from Attica, and was considered a great luxury—Attic honey could sometimes be bought in Alexandria, but honey was scarce in Egypt), for Dromon has been commanded by the god to use this as a medicament for his eyes—the order of the god is explicitly described as *κατὰ πρόσταγμα τοῦ θεοῦ*.

ὡς δ' ἂν ἀναπλήεις ὑγιαίνων, σύνταξόν τιτι τῶν παρὰ σοῦ ἀγοράσαι μέλιτος Ἀττικοῦ κοτύλην· χρεῖαν γὰρ ἔχω πρὸς τοὺς ὀφθαλμοὺς κατὰ πρόσταγμα τοῦ θεοῦ (*P.Cair.Zen.* III 59426, lines 5–8 = *Sel. Pap.* I 91 = Trismegistos 1066; 260–250 BCE).²

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1 For the liquid measure *kotyle* in the Hippocratic collection, see Potter 1980, 133.

2 The god was presumably the Memphite Sarapis, who prescribed benefits by means of dreams. The best evidence for ordinary worshipers engaging in incubation at Saqqāra was

When you are about to sail up-river in good health, order one of those in your company to purchase a *kytyle* of Attic honey, since I have need of it for my eyes, according to the god's command.

At this time, Dromon was probably living in Memphis and the temple to which he resorted would have been the great Sarapeion at Saqqâra, where medical advice was communicated to sufferers through dreams. In any case the god must have been Sarapis (identified by the Greeks with Asclepios/Imhotep), a major Memphite cult.³ The sick Dromon went to this shrine, where sometimes the sick were healed through incubation. Temples were among other things health-care centres. But what may be most interesting here is that another letter from the Zenon archive shows an *iatros* giving a prescription almost identical to the god's (*PSI* IV 413 = Trismegistos 2096).⁴ In other words, men of Greek culture were already making use of Egyptian medicine, which in turn overlapped with Greek medicine.

In another petition of the same period,⁵ a certain Zoilos of Aspendos, otherwise unknown, was apparently instructed by Sarapis to tell Apollonios, the finance minister of Ptolemy Philadelphus, that a Sarapeion should be built for him in the Greek quarter of the town, presumably at Alexandria,⁶ where the writer lived. Evading the task, Zoilos was overtaken by a dangerous illness from which he escaped only by promising to obey the god's bidding. So this text too shows us that in the early Ptolemaic period a man of Greek culture could be deeply immersed in Egyptian medical practices.

One of the temples most renowned for effective cures was the Memphis Asclepieion, where Imhotep's healing power was put into practice by specialized priests. Another much later text, a narrative in Greek preserved in *P.Oxy.* XI 1381, of the second century CE, describes how the writer and his mother regained health thanks to Imhotep, who, during a dream, cured them from a

published relatively recently: a graffito written on the left forepaw of a stone sphinx in the *dromos* around 275–225 BC states that 'there are countless mischievous ones in the sleeping chamber' ([ἐ]ν ἐνκομητηρί[ωι] | μύριοι κινάμ[ωροι] (*SEG* XLIX (1999), no. 2292).

3 Thompson 2012, 19, 72, 241–242 (incubation), and 245 n. 310. On medicine in Egyptian health-care centres, see Clarysse 2010, I, 274–290.

4 P. Lang 2013, 126.

5 *P.Cair.Zen.* I 59034 (257 BC), lines 9–10 εἰς ἀρρωστ[τ]ῆ[α]ν μ[ε] π[ε]ριέβηθεν μεγάλην ὥστε καὶ κινδυνεύει με ('I was overtaken by a dangerous illness'). The text has recently been re-edited (Renberg and Bubelis 2011; I follow their text but omit their underdotting). Disease as divine punishment was also of course a Greek idea.

6 At Memphis according to others (cf. Renberg and Bubelis 189).

violent fever. The writer's concern is the propagation of the Imhotep-Asclepius cult among the Hellenophone population of Egypt.⁷ Most medical recipes for everyday health needs relied on a pharmacopeia that drew on an amalgam of Egyptian and Greek medicine. The traffic in drugs seems to have gone in both directions, providing us with very early evidence for an interrelationship. This was in fact very far from new in Ptolemaic times. A recipe in the famous Ebers papyrus of c. 1550 BCE, for example, mentions beans of Cretan origin:⁸

Ebers 28: Another (remedy) to cause purgation . . . (then comes a section about an unknown herb) . . . which are like beans from the Keftiu land (. . .).

Archaeological evidence also suggests that there was traffic of pharmacological drugs between the Aegean world and Egypt.⁹

A papyrus of the second century BCE that refers to a native doctor specializing in the use of clysters as a cure who employed in his practice a Greek who was learning Egyptian script has given rise to extensive discussion. The letter is apparently from a mother to her son:

πυνθανομένη μανθά|νειν σε Αιγύπτια | γράμματα συνεχάρην σοι | και έμαυτήι,
 ὅτι | νύν γε παραγενόμενος | εις τήν πόλιν διδάξεις | παρά Φαλουή[τι]
 ιατροκλύστη τα | παιδάρια και ἔξεις | έφόδιον εις τὸ γήρασ. (*PLond.* I 43 =
UPZ I 148 = Trismegistos 3540; second century BCE).

When I heard that you are learning Egyptian letters, I shared your joy, since now at least on your return to the city you will be teaching the 'boys' [probably 'slaves'] in the house of Phalou[tes] the enema specialist, and you will have a way to support yourself into your old age.¹⁰

According to Roger Rémondon the employment of a Greek interpreter by an Egyptian doctor has broader implications for Egyptian society: the existence of a school, or a surgery, specialized in healing by the administration

7 The text is copied on the *verso* of *P.Oxy.* XI 1380. See Naether and Thissen 2012, Signoretti 2012. Demotic papyri tell similar tales, see e.g. Ryholt 1998.

8 Arnott 1996 and Totelin 2009, 180–182.

9 Laskaris 1999.

10 On this text see among others Rémondon 1964, Bagnall 1995, 33–35, P. Lang 2013, 205–206. An enema-doctor called an *ιατροκλύστης* occurs also in *P.Hib.* II 268 (c. 260 BC), lines 14–15, and fr.

of enemas—a typically Egyptian medical practice—proves that Greeks were incentivized to learn Egyptian (demotic script, presumably) by a desire to gain access to Egyptian medical knowledge.

Predispositions

Thus Greek medical experience in Egypt fairly soon became involved with local practices, not surprisingly. There may have been some Greek predisposition in that direction. One should not underestimate the influence of Homer, and according to a well-known passage in *Odyssey* IV, Egypt was rich in drugs and possessed the most knowledgeable doctors.¹¹ Herodotus' journey to Egypt around the middle of the fifth century BCE was by no means unique, and it is plain that by his time, that is to say Hippocrates' time too, some Greeks were greatly impressed by Egyptian medicine. Herodotus provides evidence for this and also for the high degree of specialization among Egyptian doctors:

Ἡ δὲ ἰητρικὴ κατὰ τάδε ρφὶ δέδασται· μίης νόσου ἕκαστος ἰητρός ἐστι καὶ οὐ πλέονων. Πάντα δ' ἰητρῶν ἐστι πλέα· οἱ μὲν γὰρ ὀφθαλμῶν ἰητροὶ κατατεταί, οἱ δὲ κεφαλῆς, οἱ δὲ ὀδόντων, οἱ δὲ τῶν κατὰ νηδύν, οἱ δὲ τῶν ἀφανέων νόσων (Herodotus, II 84).

Medicine there is divided up as follows: each physician applies himself to one disease only, and no more. All places abound in physicians; some physicians are for the eyes, others for the head, others for the teeth, others for the parts about the belly, and others for internal disorders.

He singles out Egyptian eye-specialists for particular mention, reporting the story that King Cyrus asked the Pharaoh Amasis to send him the best eye doctor in Egypt.¹² This text cannot by itself be more than a hypothetical guide to the attitudes of the Greek immigrants to Ptolemaic Egypt and their descendants. But the Hippocratic corpus too shows that Egyptian medicine had already aroused Greek interest.

It has been shown that the treatises of the Hippocratic collection share birth prognoses and gynaecological techniques with earlier Egyptian medical

11 *Odyssey* IV.229–32: 'the food-giving field bears most kinds of drugs: many good when mixed, many harmful. And each doctor there is knowledgeable beyond all men.'

12 Herodotus III 1: ὅτε Κύρος πέμψας παρὰ Ἀμασιν αἴτεε ἰητρὸν ὀφθαλμῶν, ὃς εἶη ἄριστος τῶν ἐν Αἰγύπτῳ ('when Cyrus sent to Amasis asking for the best eye-doctor in Egypt').

writings, such as the Papyrus Carlsberg VIII (c. 1300 BCE) and the Berlin and Kahun Medical Papyri (c. 1820 BCE), on the one hand, and the works *Barren Women* (*Steril.* 214), *Nature of Women*, and *Aphorisms* (v 59) on the other.¹³ Furthermore, an influx of Egyptian drugs into pre-Alexandrian Greek pharmacology is solidly attested by the ingredients labelled Egyptian appearing in a number of medicines recorded in the Hippocratic writings of the fifth and fourth centuries BCE. Many of the gynaecological recipes of the Hippocratic works contain Egyptian ingredients from the vegetable kingdom. In addition to *ntry* or *natron*, known to the Greeks as *nitron*, a sodium carbonate, the texts mention Egyptian alum, oil, salt, saffron, acorns, and other substances. Egyptian animal drugs—especially hyena bile and the urine and excrement of various animals (*Dreckapotheke*)—also made their debut in the Hippocratic collection before appearing later in the Alexandrian pharmacopeia.¹⁴

An intriguing case study is provided by a Rylands papyrus of Ptolemaic date, which combines the format of a Hippocratic-style gynaecological collection with ingredients attested here for the first time. The text, of unknown provenance and assigned to the third or second century BCE, preserves a version of a recipe against uterine suffocation parallel to a Hippocratic prescription contained in a passage of *Diseases of Women*. A small variation in one of the ingredients indicated, however, merits mention here. While the Hippocratic version reads ‘when she is suffocated by the womb, let her drink *castoreum* and fleabane in wine separately or together’,¹⁵ the papyrus version runs as follows:

πρὸς τοὺς ἀπὸ τῶν ὑστερῶν πνιγμῶν ἐνυδρίδος τοὺς | νεφροὺς ξηράνας δίδου
ἄρον τοῖς τριῖν δακτύλοις λαβεῖν ἐν οἴνῳ εὐώδει τοῦτο καὶ πρὸς τοὺς τῶν
διδύμων πό|νου<< > βο{ι}ηθεῖ καὶ κλυστήριόν ἐστιν ὑστερῶν (*P.Ryl.* III 531, II,
lines 12–15).

13 Iversen 1939. Further discussion in Totelin 2009, 179–183.

14 The use of dung is a mark of Egyptian influence, see Nunn 1996, 148–151 (drugs of animal origin). For animal drugs, see, e.g., Hippocrates, *Nat. mul.* 7.1 (τῷ οὐρῷ τῷ τοῦ ἀνθρώπου), 18.3 (καὶ πίνειν διδόναι τὸν κάστορα), 32.89 (χολῆν ταύρου), 32.97 (ὑὸς χολῆν), 34b1 (οὐρου βοείου); *Mul.* I 75 (λύκου κόπρον), II 189 (πελιάδων κόπρον); *Steril.* 245 (ὄνιδα ξηρήν), *Superf.* 28 (τοὺς σκώληκας δὲ τοὺς κοπρίνους), 32 (κάστορος ὄρχιν) (VIII 164.15; 370.4; 458.21; 492.21; 500.21 Littré), and *Loc. Hom.* 47.8, where cow dung and cow bile are recommended for women’s ailments. Crocodile dung and hyena bile were among the animal products utilized by Herophilus for an ointment in the mid-third century BCE, according to Aëtius VII 48 (*CMG* VIII 2, 303 = T260 von Staden).

15 Cf. Hippocrates, *Mul.* II 200–201 (VIII 382–386 Littré, c. 450 BCE; esp. VIII 382.12–13 Littré): “Ὅταν πνίγηται ὑπὸ ὑστερέων· κάστορα καὶ κόνυζαν ἐν οἴνῳ χωρὶς καὶ ἐν ταυτῷ πινέτω.

In the case of hysterical suffocation, take dried otters' kidneys, as much as can be held in three fingers, and serve in sweet-smelling wine. This is also helpful in the case of pains in the testicles and is an enema for the womb.¹⁶

The author was likely re-contextualizing the existing Hippocratic medications using otter kidneys as a substitute for *castoreum* (a very common drug in Hippocratic and Roman pharmacology, it is the exudate from the castor sacs of the mature *Castor fiber L.*, the beaver).¹⁷ Why does the compiler of this papyrus recipe prescribe not *castoreum* but the unusual otter kidneys, of which there is no mention in the Hippocratic writings? The compiler may have had access to collections of recipes that circulated anonymously and independently from the Hippocratic works. An equally attractive hypothesis, however, is that the author was a Greek living in Egypt who was familiar with efficacious Egyptian substances of the animal kingdom. The change seems to furnish an example of the adaption of a recipe to an Egyptian milieu. Herodotus mentions the Nile otters (II 72), asserting that they were thought to be sacred, whereas *Castor fiber* is hard to imagine in such an environment.¹⁸

Tebtunis

Of the villages in the Arsinoite nome, it is arguably Tebtunis that gives us the best opportunity to analyse Greek-Egyptian medical interactions in the Roman period, and I shall sketch something of the topic as I see it and the kinds of contributions that Tebtunis papyri can make to studying this cultural phenomenon. Tebtunis also offers the potential for putting documents into an archaeological context, a context only partly recoverable from finds at other sites. Moreover, early Roman Tebtunis had a thriving Egyptian temple community, with numerous priests who took an interest in the religious and technical literature pertaining to their status. The House of Life there accommodated a collegium of priests whose prime duty was to use rituals to protect the gods,

16 = MP³ 2418; LDAB 1313. Cf. Hippocrates, *Mul.* II 200–201 (VIII 382 Littré). See further Hanson 1998, esp. 79–81, Andorlini 1999, esp. pl. 3, and Hanson 2009, 73 n. 6.

17 Cf. Celsus, *Med.* XXIII 1, 5; XXV 8, 12. The yellowish secretion of the castor sacs was, and still is, used as a tincture in perfumes, and, until the eighteenth century, was used to treat many different ailments (including headache, fever and hysteria).

18 Cf. Herodotus IV 109 on beavers in Scythia, and the use of beaver testicles there for curing diseases of the womb. Beavers were in fact extinct in the Mediterranean world long before Herodotus or Hippocrates: Devecka 2013, 90.

and to establish an instruction centre where priest-doctors could pass on their knowledge to practitioners. Most of the documents we have, however, did not belong to a temple library, but to individual priests.¹⁹

From Tebtunis too come evidence that the traditional Egyptian use of papyrus for medicinal purposes²⁰ spilled over into the Hellenic or semi-Hellenized community. But the Hippocratics already knew of burnt papyrus as a medical ingredient.²¹ Papyrus served as an ingredient of recipes, while papyrus paper functioned as a bandage or as an adhesive plaster. Papyrus competed with linen as a means of applying remedies to the affected part of the body. Strips of papyrus served on occasion as bandages, but far more frequent was the use of a *chartarion* as a sort of band-aid intended to keep the poultice attached to the diseased part of the body. Both these applications are mentioned in papyri of the Roman period excavated in the temple context of Tebtunis. In the recipes surviving in the collection of *PSI X 1180*,²² ‘burnt papyrus’ wetted in water is the component of a lotion used specifically to treat leprosy, while a piece of medicated paper was applied locally for lichen.²³ One notes that the instruction given in the Ebers recipe (Ebers 482), in which ‘burnt papyrus not

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- 19 Tait 1992, Ryholt 2008. The Tebtunis papyri of the Roman period come from several groups of different origin: the papyri excavated by Grenfell and Hunt, now at Berkeley; the Florentine fragments, both Egyptian and Greek, excavated by the Italian Archaeological Mission under C. Anti and G. Bagnani between 1931 and 1933, now at the Vitelli Institute in Florence; and those found clandestinely and now in many collections. Cf. O’Connell 2007.
- 20 Our information about this practice goes back to the Ebers papyrus (see above). ‘Cooked unwritten papyrus’ mixed with ‘wax, oil, and *wah*-legume’ appears to be applied on the fourth day of a cure to relieve the pain of a burn (Ebers 482).
- 21 Hippocrates, *Mul.* I 105 (c. 450 BCE; VIII 228.20–23 Littré).
- 22 Full edition in Andorlini 2004a. This text was part of a large number of rolls in both the Greek and Egyptian languages, with the Egyptian ones written in both Hieratic and Demotic scripts. The papyrus was found by the Italian excavators at Tebtunis in two subterranean rooms adjacent to the temple complex of the crocodile-god Sobek, cf. Andorlini 2004b (with earlier bibliography), Hanson 2005.
- 23 Cf. *PSI X 1180*, Fr. A, III, lines 5–7: τὸν λιχῆνα προεζιμηζόμενον κατὰ χριε καὶ ἔξωθεν γύριν ἐπάνω δὲ | το[ῦ] φαρμάκου χαρτάριον ἐπίθεε (‘having rubbed the area affected by lichen beforehand, smear it with the finest meal externally, and cover the application with a bandage made from papyrus’), and *PSI X 1180*, Fr. A, II, lines 11–12: πρὸς λέπρας, ἐὰν ἐχ[θ]έρησῃς αὐτὰς, βάμμα παπύρου κεκαυμ(ένης) (‘against leprosy; when you have scraped off these lesions, prepare an ointment with burnt papyrus’). For this use, cf. Dioscorides, *MM* I 86.1 Wellm.: ἡ δὲ κεκαυμένη πάπυρος ἄχρι τεφρώσεως δύναται νομάς ἐπέχειν τὰς ἐν στόματι καὶ παντὶ μέρει· βέλτιον δὲ ὁ χάρτης καεῖς δρᾶ τὸ τοιοῦτον (‘papyrus that is burned to ashes keeps in check sores in the mouth and everywhere else; but papyrus roll that was set on fire does this kind of thing better’).

previously written on' is specifically recommended, coincides with the information in the recipe book from Tebtunis. Both Egyptian and Greek traditions confirm that the application of papyrus sheets to wounds (sheets assembled into a roll, i.e. a *chartarion*) was by far the commonest medical use of papyrus in antiquity.²⁴

Also at Tebtunis, the use of 'hyena bile' (in *PSI* x 1180, Fr. B, col. III, line 15 $\chi\omicron\lambda(\eta\varsigma) \acute{\upsilon}\alpha\iota\nu(\eta\varsigma)$) and 'excrement of ibis' (in Fr. A, col. III, line 21 $\text{\textit{\iota}}\beta[\iota\omicron\varsigma] \kappa\acute{o}\pi\rho\nu\omicron\nu$) reveals the penetration of Egyptian *Dreckapotheke* into a *receptarium* composed in Greek.

Egyptian Medicine in the Wider World

Given the Hippocratic writers' interest in Egyptian recipes and the prestige of Alexandrian doctors such as Herophilus, it is scarcely surprising that Greek doctors in the wider Mediterranean world continued to show interest in Egyptian drugs and medicine.

In an anonymous treatise within the Galenic corpus entitled 'Introduction, or the Doctor' and roughly datable to the first or second century CE, special attention is paid to Egypt.²⁵ At the very beginning the author raises the question of the invention of the art and provides answers emphasizing the Egyptian advances in medicine, referring to the lines in *Odyssey* IV on the use of drugs, and citing other stories of the Egyptian medical tradition that were in vogue in his time: dissections of corpses in mummification, treatment of cataract, the invention of the clyster (or enema), and so on. It has been cautiously suggested that the attention devoted to Egypt throughout may indicate the homeland of the author.²⁶

24 Cf. Andorlini 2015.

25 Εἰσαγωγή ἢ ἱατρός alias *Introductio seu medicus* (XIV 674–797 K.). See now the edition of Petit 2009, I, 1–3: Πῶς εὑρηται ἡ ἱατρική; ... παρὰ δὲ Αἰγυπτίοις ἦν μὲν καὶ ἡ τῶν βοτανῶν χρῆσις καὶ ἡ ἄλλη φαρμακεία, ὡς καὶ Ὀμηρος μαρτυρεῖ ... ἐκ δὲ τῆς ἐν ταῖς ταρχείαις ἀναρχίσεως τῶν νεκρῶν πολλὰ καὶ τῶν ἐν χειρουργίᾳ παρὰ τοῖς πρώτοις ἱατροῖς εὐρησθαι δοκεῖ. τίνα δὲ ἐκ περιπτώσεως φασὶν ἐπινενοῆσθαι ... καὶ τὸ κλύζειν δὲ ἀπὸ τῆς ἰβέως φασὶν εὐρεθῆναι (...). 'How was medicine invented? [A short paragraph about the Greeks follows, mentioning plants and *pharmaka*]. But among the Egyptians too plants and other *pharmaka* were used, as Homer also testifies ... It seems that many surgical practices employed by the first doctors were invented as a result of dissection of corpses for purposes of mummification. Others are said to have been discovered by accident [he describes a cataract procedure]. And clyster evacuation is said to have been modeled on observation of the ibis [on the Nile].'

26 Issel 1917, Hanson 1985, 25–6; cf. Petit 2009, 109.

In a further attestation to the enduring reputation of Egyptian practitioners outside the country, we learn from Pliny that Egyptian specialists in skin diseases regarded as native in Egypt, such as leprosy and lichen, were from time to time invited to Rome to treat difficult cases.²⁷ But Galen is naturally our richest source.

A passage from Galen's work *On the Composition of Drugs according to Places* reports the following:

τὸ ἀχάριστον ἐπιγραφόμενον, πρὸς τὰς μεγίστας ἐπιφοράς. μόνῳ τούτῳ ἐν Αἰγύπτῳ οἱ ἰατροὶ χρώμενοι εὐήμεροῦσι καὶ μάλιστα ἐπὶ τῶν ἀγροικοτέρων (Galen, *Comp. sec. loc.* IV 7 = XII 749.13–15 K. ex *Asclepiade*).

An eye salve called *achariston*, against severe flux from the eyes. By use of this remedy alone, the physicians in Egypt are successful (in treating the disease), especially among the country people.

In another passage Galen praises a 'yellow plaster' that seems to have been derived from an Egyptian milieu:

τὴν ἐνδοξοτάτην τῶν κίρρων, ἣν ὀνομάζουσι διὰ δικτάμνου, τῶν ἱερῶν ὀνομαζομένων καὶ αὐτὴν, ὡς περ ἡ Ἴσις, ἐπειδὴ φασὶν αὐτὰς ἐκ τῶν ἱερῶν τῶν ἐν Αἰγύπτῳ κομισθῆναι (Galen, *Comp. per gen.* II 12 = XIII 518.7–9 K.).

the most famous of the 'yellow plasters', which they call "made with dittany" and which is named among the 'holy plasters', like the 'Isis' plaster, because they say that they have been brought from the temples priests in Egypt.

Note that there is a recipe entitled 'yellow plaster' in our Tebtunis *receptarium*, namely in *PSI X* 1180, Fr. A, II, line 32 (κίρρά).

In another example Galen records a remedy called 'Hybris' (perhaps to be interpreted as 'very energetic'), apparently devised by someone from Oxyrhynchus and known to him through another Egyptian Greek:

²⁷ Pliny, *NH* XXVI 4: 'adveneruntque ex Aegypto, genetrix talium vitiorum, medici hanc solam operam adferentes magna sua praeda', and *NH* XXIX 93: 'Cossinum equitem Romanum amicitia Neronis principis notum, cum is lichene correptus esset, vocatus ex Aegypto medicus ob hanc valetudinem eius a Caesare, cum cantharidum potu praeparare voluisset, interemit.'

Ἄλλη. Ὑβρις τοῦ Ὁξυρυγχίτου, φάρμακον ἐπιτετευγμένον πρὸς παντὸς ἰοβόλου πληγῆν. ἀνεγράφη ὑπὸ Ἀπολλωνίου τοῦ Μεμφίτου. (Galen, *Antid.* 2 = XIV 188.9–12 K.).²⁸

Another remedy called ‘Hybris’, obtained by a man from the Oxyrhynchite [sc. nome], is very effective against the bite of every venomous animal; it is recorded by a certain Apollonius from Memphis.

This antidote, applied against poisonous bites from animals, curiously overlaps the evidence of a Tebtunis papyrus concerned with bites of asps and crocodiles (*P.Tebt.* II 273 = *GMP* II 5, VI, line 9), exemplifying the process of derivation and adaptation from an Egyptian environment.

Galen learned by experience in Alexandria that amputation of fingers was effective for asp-bites (*De loc. aff.* III II = VIII 197.9–16 K.).²⁹ He also uses dung of crocodiles, possibly imported from Egypt, as a means to cure skin diseases (*Simpl.* X 29 = XII 308.7–12 K.).³⁰

A Late-Antique Coda

Perhaps the most explicitly medical votives to have survived from Coptic Egypt are those found in the shrine of the local saint Colluthus, commonly referred to as Abu Colta, which are associated with the numerous iatro-magical papyri found during the excavations led by John de Monins Johnson at Antinoöpolis.³¹

28 The text given by Kühn runs Ὑβρις τοῦ Ὁξυρυγχίτου, alluding to a man named Ὑβριςτής (*vel* -ίςτας), a personal name not attested in Egypt so far. For Ὑβρίστας and Ὑβριςτος documented outside Egypt, see *LGPV* 2013, V.B, 418. The mention of the nome Oxyrhynchites, however, requires the construction τοῦ Ὁξυρυγχίτου. Thus Ὑβρις τοῦ Ὁξυρυγχίτου can be regarded as a plausible correction.—Both Winkler 1980, 73–79 (on p. 53 she prints Hybristes), and Ihm 1997, 237, assume that the chapter by Galen πρὸς ἐχιοδήκτους (XIV 183–190 K.) relies on Asclepiades.

29 See Gourevitch, this volume, p. 000.

30 ἡ δὲ γε τῶν κροκοδείλων κόπρος ὡς περ τῶν προσώπων τὴν ἔφηλιν ἀφαιρεῖν πέφυκεν, οὕτω καὶ ἐλεῖν ἀλφρούς καὶ λειχήνας: ‘The excrement of crocodiles, just as it naturally removes facial spots, so too it gets rid of leprosy and lichen’ (the apparent meaning).

31 I am grateful to Rosario Pintaudi for providing me in advance with the article of Peter Grossmann on the procedure of incubation in the shrine of St. Colluthus (Grossmann 2014). For images of *ex votos* see *Antinoupolis 1* (Pintaudi 2008), 27, nos. 64 and 65. Cf. Andorlini 1998, 19–22. *P.Ant.* II 66 includes thirteen magico-medical prescriptions; cf. *P.Ant.* II 65 and 140.

The shrine of Saint Colluthus, recovered in the northern necropolis of the Greek city of Antinoöpolis in middle Egypt, developed a traditional Egyptian oracle procedure. At Saint Colluthus' sanctuary people found familiar rites of divination. In the *kiman* of the northern necropolis were recovered many Christian 'ticket' oracles, still unrolled or thrown away after opening, and some of the most precious *ex votos* of bronze, which were left behind to acknowledge Colluthus' most impressive *miracula*.³² Most of the queries concerned business and travel, but some addressed health issues. The vast majority of the *ex votos* were in the form of breasts, eyes, and feet.³³ Colluthus was a healer renowned for curing eye diseases, supposedly martyred at the beginning of the fourth century CE under Emperor Diocletian. Devotees would present written queries, worded in both positive and negative form, and receive back the portion of the query that the saint's local priests deemed correct.³⁴ Amulets and other objects associated with Colluthus were certainly believed to work, and the regional cult-centre of Antinoöpolis, with its *oekonomus*, eclipsed scientific medicine, following scribal formulations and the practice of incubation identical to those used in traditional Egyptian temples.

This is not the place to write the history of the medical use of amulets in Egypt. Suffice it to say that they were an old tradition in both Egyptian and Greek milieux. Here are two allusions, the first from an Oxyrhynchus papyrus:

τὸ πρὸς παρίσθμια περίαμμα | εἰς τὸ χρυσοῦν πέταλον τῷ Καρμάτῃ | πέμψον
γρα[[.]]ψακ (*lege* γράψακ) εἰς πιττάκιον | ὡς περιέχει. (*P.Oxy.* XLII 3068.1–4,
3rd)

The amulet against tonsillitis, for the gold plate, send it to Sarmates, having copied it on a slip of papyrus word by word.

Here is another from the collection of the *Greek Magical Papyri* published by Preisendanz:

Φυλακτήριον σωματοφύλαξ πρὸς δαίμονας, πρὸς φαντάσματα, || πρὸς
πάσαν νόσον καὶ πάθος. ἐπιγραφόμενον ἐπὶ χρυσεῦ | πετάλου ἢ ἀργυρείου ἢ
κακσιτερίνου ἢ εἰς ἱερατικὸν χάρτην φορούμενον στρατιωτικῶς ἔστιν (*PGM* VII,
col. 16, 580–584 = Preisendanz II, 26).

32 For the miracles of Saint Colluthus, renowned as *archiatros*, see Till 1951. For therapeutic oracular tickets addressed to Colluthus, cf. Donadoni 1964, Zanetti 2004.

33 See Devos 1981, Del Francia Barocas 1998, 101.

34 Cf. Frankfurter 1998, 3–48, Fournet 2009, 129 and pl. 26, Schenke 2013.

A phylactery, a guard against daimons, against phantasms, against every sickness and suffering, to be written on a leaf of gold or silver or tin or on hieratic papyrus. When worn it works mightily.³⁵

Conclusions

The ancient prestige of Egyptian medicine among the Greeks, based presumably on the general prestige of Egyptian culture and on the high degree of specialization among Egyptian doctors, is likely to have made the Greek immigrants into Egypt more willing to take up local medical practices, as of course they did. But Egyptian influence was felt outside the country too once writers in the Greek language made Egyptian medicine more widely known in other parts of the Mediterranean and international doctors such as Galen came to know more about it. And there was surprisingly little criticism, even of *Dreckapotheke*.

35 Trans. H.D. Betz 1986, 134.