

The Ugaritic Hippiatric Texts and *BAM* 159*

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Dedicated to the memory of my teacher,
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In the introduction to our recently published critical edition of the Ugaritic hippiatric texts, D. Sivan and I made the following contention:¹

As regards the sub-genre of hippiatric texts to which the present texts undoubtedly belong, it should be noted that the Ugaritic hippiatric texts are unique within Ancient Near Eastern literature in that, as opposed to the Akkadian and Hittite hippiatric texts which deal with the training of (*healthy*) chariot horses, the Ugaritic hippiatric texts are therapeutic texts dealing with the curing of *sick* horses. The latter type of hippiatric texts is elsewhere extant only later on in history in the Greek and Roman periods when this sub-genre is fully developed.

Now, while this assertion remains technically valid, it was made without an awareness of the contents of *BAM* 159.² It is the purpose of the present study both to rectify that omission and to discuss the contribution of *BAM* 159 to our understanding of the Ugaritic hippiatric texts.

*I here wish to thank Professors J. Klein and A. Skaist of Bar-Ilan University and Dr. D. Sivan of Ben-Gurion University for reading and commenting on this paper. Any errors which remain are, of course, my responsibility alone.

1 C. Cohen and D. Sivan, *The Ugaritic Hippiatric Texts: A Critical Edition* (= American Oriental Series, Essay 9 [New Haven, 1983]), 2. This work is referred to hereafter as *UHT*. All other abbreviations are according to the lists in *UHT*, immediately before page 1, and *CAD* Q, vii–xxii.

Here it should be noted that those Akkadian and Hittite texts which deal with the training of healthy chariot horses should not be technically labeled hippiatric, but rather hippological, since the former term is defined as "Relating to the treatment of diseases of horses; . . . a treatise on this," while the latter term is defined as "Relating to hippology ('the study of horses')." See *The Compact Edition of the Oxford English Dictionary I* (Reprint: Oxford, 1971), 1308–9. *UHT*, 2 and passim should be corrected accordingly. I hereby thank Dr. J. Safren of Ben-Gurion University for calling my attention to this matter.

2 The original assertion in *UHT*, 2 remains technically valid because the two hippiatric sections of *BAM* 159 (see below) are not independent texts like the Ugaritic hippiatric or the Hittite and Akkadian hippological texts, but

1. *BAM 159—Typology and Content*

The Neo-Assyrian medical text³ *BAM 159* (= A 198)⁴ as copied by F. Köcher includes some 290 lines and is described by him as a nearly completely preserved “*altere Tafel*” containing medical prescriptions dealing with diseases of the urinary tract, internal diseases, eye ailments, toothaches and various pathological symptoms which were thought to be under the influence of spirits of the dead.⁵ In column V lines 33–47, there are two

rather two sections of a much larger composition, the rest of which does not at all deal with horses (see §1 below). Here, let me speculate that the two hippiatric sections were placed in their present position because in the section of *BAM 159* immediately preceding them, the administering of the remedy concerns the nose just as it does in the first hippiatric section [for the first hippiatric section, see §3c below; the two lines immediately preceding, *BAM 159*, V:31–32, read as follows: *9 šammī pišu u naḫīrišu būšānu šabtu ina dišpi takappa[r]* “9 drugs (for when) his mouth and his nostrils are seized with the *būšānu*-disease, with honey you should wipe (them)]. Likewise, the section of *BAM 159* immediately after the second hippiatric section may well have been placed there both because this section also deals with an intestinal disease [*BAM 159*, V:48: *šumma amēlu qerbūšu nuppuḫū* “If a man’s intestines (feel) swollen”] like the *kis libbi*-intestinal disease in horses dealt with in the two hippiatric sections of *BAM 159* (see §3b below) and because the administering of the remedy in this section [*BAM 159*, V:52: *ana šuburrišu tašappakma iballuṭ* “into his anus you should pour and he will (then) recover”] is identical to the administering of the remedy in the second hippiatric section (see §3c below). See also the appendix at the end of this study.

3 The bulk of the extant medical texts in the Akkadian language were copied in the Neo-Assyrian period in the two Assyrian capitals, Aššur and Nineveh. They date from about 1000 B.C.E. to 612 B.C.E. All the extant Akkadian medical texts and related texts dealing with *materia medica* are now being published together (many for the first time) by F. Köcher in the multi-volumed series *BAM = Die babylonisch-assyrische Medizin in Texten und Untersuchungen* (Berlin, 1963–). Since the vast majority of these texts have not yet been adequately treated and translated, no serious introduction to cuneiform medical texts has yet been written. The four most important articles which have been used extensively by the present author are as follows (they also include complete bibliography): Edith K. Ritter, “Magical Expert (= *Āšipu*) and Physician (= *Asū*): Notes on Two Complementary Professions in Babylonian Medicine,” *Studies Landsberger = AS 16* (1965), 299–321; R. D. Biggs, “Medicine in Ancient Mesopotamia,” *History of Science 8* (1969), 94–105; A. L. Oppenheim and Erica Reiner, *Ancient Mesopotamia*² (Chicago, 1977), 288–305, 384–86, 396–97; A. L. Oppenheim, “Man and Nature in Mesopotamian Civilization,” *Dictionary of Scientific Biography 15* (1978), 645–46, 659–60. Most recently, consult S. Parpola, *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal*, II (Neukirchen-Vluyn, 1983), 534 (medical index). An earlier treatment which is still somewhat useful because of the large number of textual excerpts translated and discussed is H. W. F. Saggs, *The Greatness that was Babylon* (New York, 1962), 433–43. It is hoped that the article “Medizin” which should soon appear in the *Reallexikon der Assyriologie und vorderasiatischen Archäologie* (Berlin, 1928–) will at least partially fill the aforementioned gap and provide the scholarly world with a serious, extensively documented introduction to this fascinating, but much neglected subject.

4 All tablets numbered with an A-prefix derive from the collection of the Museum of the Ancient Orient in Istanbul. There are 26 such tablets in *BAM II* including *BAM 159*. All tablets published in *BAM II* were excavated in the Assyrian capital, Aššur. See *BAM II*, p. VII.

5 See *BAM II*, pp. XIV–VI. Text 159 appears on plates 50–59 of that volume.

prescriptions dealing with sick horses (ANŠE.KUR.RA in lines 36, 46, 47—see §2 below),⁶ which are apparently unique in Mesopotamian literature.⁷

2. *The Structure of the Two Hippiatric Sections of BAM 159*

In contrast to the consistent tripartite structure of all sections of the Ugaritic hippiatric texts (the symptom[s] of the malady affecting the horse, the remedy-components and their preparation, the administering of the remedy to the horse),⁸ neither of the two Akkadian hippiatric sections of *BAM 159* contains all three parts. The first section (V:33–36) is structured as follows: a) listing of the eight remedy-components (lines 33–35)⁹; b) a summary statement of the number of remedy-components together with the name of the disease being treated (lines 35–36: 8 *šammī kīs libbi ša sīsē* “8 drugs for the *kīs libbi*-

6 The nature of these two prescriptions was already clearly indicated by F. Köcher in 1963 in *BAM II*, p. XV. Both of the major Akkadian dictionaries, *CAD* and *AHw.*, occasionally err with respect to the nature of these two sections or their uniqueness vis à vis the rest of *BAM 159*. Thus, *AHw.*, 714b correctly distinguishes between the dual usage of *naḥīrišu* “his nostrils” in *BAM 159*, V:36 and the singular usage of *ina naḥīr šumēlišu* “in his left nostril” in *BAM 159*, V:36, but lists both passages under the category “v *Menschen*” (*BAM 159*, V:36 does indeed refer to the human nose, but *BAM 159*, V:36 is within a hippiatric section referring to the left nostril of the horse and therefore should have been listed under “3) *Nüstern v Tieren* on the same page). On the other hand, *CAD N/1*, 137 lists both of the above passages under the category “referring to animals.” The latter misunderstanding of *BAM 159*, V:31 as referring to a horse may have been caused as a result of a misreading in line 29 of the remedy-component Ū.KUR.RA (= Akkadian *ninū* “Ammi”; see *UHT*, 29). The logogram for *sīsū* ‘horse’ is ANŠE.KUR.RA and it is the inclusion of that term in lines 36, 46, and 47 which identifies *BAM 159*, V:33–36 and 37–47 as hippiatric sections. Since ANŠE.KUR.RA is often abbreviated KUR.RA especially in Neo-Assyrian texts (see *AHw.*, 1052), it is not difficult to understand the source of that error. Nevertheless, both the occurrence of Ū (= Akkadian *šammu* ‘drug’) and the inclusion of this term within the first line of the section *BAM 159*, V:29–32, which consists entirely of five of the nine remedy-components listed in this section, precludes any possibility of the reading *sīsū* ‘horse’ in this context.

7 Despite Köcher’s 1963 statement in *BAM II*, p. XV labeling these two Akkadian hippiatric sections “zwei Rezepte der Veterinärmedizin, die die Heilung von Pferdekolik . . . behandeln,” the only reference that I have found to these two hippiatric sections in a description of Mesopotamian medicine is Oppenheim, *Man and Nature*, 660, n. 150. The latter reference is also the only one in which these two Akkadian sections are listed alongside the Ugaritic hippiatric texts (for which see now *UHT*). To the literature concerning ancient Egyptian veterinary prescriptions in Oppenheim, loc. cit., add H. Grapow and W. Westendorf, “Medizinische Literatur,” *Ägyptologie-Literatur* (Leiden, 1970), 212–19. Here it should be noted that the Ugaritic hippiatric texts and the two Akkadian hippiatric sections of *BAM 159* are the only extant hippiatric texts before the Greek and Roman periods (see *UHT*, 1–3). All other ancient veterinary prescriptions referred to in Oppenheim, loc. cit., pertain to animals other than horses. Note finally that in his 1969 essay, R. D. Biggs mentioned that “a recently published medical text states that a specific medication can be used for the same ailment in horses.” See Biggs, *Medicine in Ancient Mesopotamia*, 98. Unfortunately, Biggs does not actually cite the text he is referring to; we can only surmise that the reference here is likewise to the two Akkadian hippiatric sections of *BAM 159* (which were first published in 1963; see notes 3 and 6 above).

8 See *UHT*, 48–50, and note especially the diagram on p. 51.

9 The first five remedy-components are transliterated by Köcher in *BAM II*, p. XV.

intestinal disease¹⁰ of horses”); c) the preparation of the remedy, its administration to the horse and the final assertion that the horse will recover [line 36: *ina karāni ṣaḫti ina naḫīr šumēlišu tašappakma iballuṭ* “in (a solution of) wine-must,¹¹ into his left¹² nostril¹³ you should pour¹⁴ (the remedy) and he will (then) recover”¹⁵].

10 For the *kīs libbi*-intestinal disease, see §3b below. Note that it is being assumed here that the *kīs libbi*-intestinal disease is also the ailment which is being treated in the second Akkadian hippiatric section (*BAM* 159, V: 37–47), even though no specific disease is referred to there. This assumption was also apparently made by Köcher, who describes both sections as dealing with the healing of “*Pferdekolik*” (see n. 7 above). It may well have been self-understood (and a scribal convention) that in a given text, if no specific ailment is referred to (either by name or by symptom) in a section of that text, then the prescription in that section refers to that disease which is the subject of the previous section of the same text.

11 For *karānu ṣaḫtu* ‘type of wine-must’ in Assyrian medical texts, see the many references provided in *AHW.*, 1075, and in *CAD* §, 63–64. For the translation “type of wine-must (i.e. juice pressed out from grapes before or during their fermentation)”, cf. *AHW.*, 1078, contra *CAD* §, 64 (discussion section), where the translation “‘drawn’ wine” is based on a misunderstanding of Akkadian *ṣaḫātu* ‘to press, wring out’ and its Semitic cognates. For the correct understanding of this term and its cognates in BH and MH, see H. R. Cohen, *Biblical Hapax Legomena in the Light of Akkadian and Ugaritic* (Missoula, 1978), 35 and esp. 56, n. 29.

12 The closest Biblical parallel to this usage of *ina naḫīr šumēlišu tašappak* “into his left nostril you should pour” is Lev. 14:26 (cf. verses 15, 16, and 27): *wmn ḥšmn yšq ḥkhn l’kp ḥkhn ḥsm’lyt*, “The priest shall then pour (cf. Ugaritic *yšq b’aph* in §3c below) some of the oil into his own left palm.” In fact, most of the Biblical occurrences of *ymin* ‘right’ and *šm’l* ‘left’ with reference to specific parts of the body (other than *yd* ‘hand’ which is either very general [e.g., Ezek. 39:3] or is used idiomatically as a symbol of strength or power in the expression (*yd*) *ymink/w/y* ‘his/your/my right hand’ [e.g., Exod. 15:6; Ps. 121:5] and even more commonly in the parallel pair *yd//ymin* ‘hand//right hand’ which occurs in both Biblical and Ugaritic poetry [e.g., Ps. 89:14; cf. M. Dahood, “Ugaritic-Hebrew Parallel Pairs,” *Ras Shamra Parallels I* (Rome, 1972), 195–96 (#218)]) occur within the Biblical Priestly Instructions (PI) and are an excellent example of the highly technical language of the professional instructions addressed to the priesthood in that literary sub-genre, which is the sole Biblical representative of the Ancient Near Eastern corpus of “professional instruction literature.” For the latter literary genre (which also includes all the ancient Near Eastern hippiatric as well as human medical texts), see provisionally *UHT*, 1–2 and the bibliography cited there. For this technical usage of ‘right’ and ‘left’ with respect to parts of the body (*šwq* ‘thigh [of sacrificial animal]’; *zn* ‘ear’; *bhn yd* ‘thumb’; *bhn rgl* ‘big toe’; *šb* ‘finger’; *kp* ‘palm’), see Exod. 29:20, 22; Lev. 7:32, 33; 8:23, 24, 25, 26; 9:21; 14:14, 15, 16, 17, 25, 27, 28; Num. 18:18. On the general Biblical and ancient Near Eastern literary usage of “right and left,” see H. Cohen, “Right and Left,” *EJ* 14 (1971), 177–79. Add to the bibliography there R. Needham, ed., *Right and Left* (Chicago and London, 1973).

13 For the usage of *naḫīru* ‘nostril’ in Akkadian medical texts, see *CAD* N/1, 137; *AHW.*, 714. (see also n. 6 above). For the latest discussion of “nosebleed,” see Parpola, *Letters from Assyrian Scholars* 2: 246–47.

14 This usage of *šapāku* ‘to pour’ with respect to the pouring of the remedy into the horse’s left nostril is the final proof of the meaning of Ugaritic *wyšq b’aph* “and it (the remedy) should (then) be poured into his nose” in the Ugaritic hippiatric texts. See n. 19 and §3c below.

15 The verb *iballuṭ* ‘he will (then) recover’ is found passim as the last word in many medical prescriptions (see *CAD* B, 54, and *AHW.*, 99) expressing the absolute conviction that the patient will indeed recover if these professional instructions are followed. The verbs *inēš* ‘he will recover’ and *išallim* ‘he will heal’ often replace *iballuṭ* in these texts with precisely the same connotation (see *CAD* N/2, 197, and *AHW.*, 782–83, 1143). For this usage of these three terms, see Ritter, *Magical Expert . . . and Physician . . .*, 302, n. 12, 304 [note that these terms occur in both *asātu*-professional prescription texts and in *āšipātu*-magical treatment and prognostic texts]; and in general Oppenheim and Reiner, *Ancient Mesopotamia*², 291. One of the identifying grammatical characteristics of the ancient Near Eastern genre of professional instruction literature (see n. 12 above and provisionally, *UHT*, 1–3) is the use of “impersonal jussive verbal forms in the second person or third person masculine or the passive voice.” This identifying characteristic does not apply to the verbal forms in the protasis or symptom part of these texts (where imperfect verbal forms occur in the indicative in Ugaritic; see *UHT*, 44), but rather to those “verbal forms having to do with the preparation and administering of the remedy” which are thus “connected with professional instructions” (see *UHT*, 44). The usage of *iballuṭ* ‘he will (then) recover’ at the end of Akkadian medical texts with

The second section (V:37–47) has the following structure: a) a listing of the 23 remedy-components (lines 37–41); b) a summary statement of the number of remedy-components together with instructions for the preparation of the remedy including a ritual element¹⁶ (lines 41–45); c) the administering of the remedy to the horse and the measure of remedy per horse [lines 45–47: *ana mašqite tessip ana šuburrišu tašappak mašqite ša sīsē ša ištēn sīsē 4 qa šikaru bašlu* “into the leather enema bag¹⁷ you should gather (the

a clearly indicative connotation must be separated from the verbal forms with a clearly jussive connotation, which immediately precede it in the instructions concerning the preparation and administering of the remedy. The same usage of BH *wēyehū* “and he will (then) recover” (which is certainly contextually indicative despite its *yaqtul* pausal form) occurs after two contextually jussive verbal forms in Isa. 38:21, which is very similar in structure to the Akkadian medical prescriptions. BH *hyy* is the exact interdialectal equivalent of Akkadian *balātu* ‘to live’. Contrast 2 Kgs. 20:7 where imperfect *wēyehū* ‘and he will (then) recover’ has been replaced by imperfect consecutive *wayyehū* ‘and he recovered’ and the entire prescription format has been replaced by a command-action sequence. For the therapeutic usage of the remedy-components mentioned in 1 Sam. 30:12; 2 Kgs. 20:7; Isa. 38:21 in comparison with the Ugaritic hippiatric texts, see *UHT*, 40–42.

Isa. 38:21 is not the only Biblical parallel to this contextually indicative usage of *iballūt* in Akkadian medical texts. Professor J. Klein has kindly reminded me of such additional passages as Num. 21:8; Josh. 5:8; 2 Kgs. 1:2; 8:8, in which BH *hyy* can be best understood in the meaning ‘to recover (from illness)’ rather than ‘to live’ and which therefore *semantically* parallel the usage of *balātu* being discussed here. Furthermore, *grammatically* speaking, the terms *wḥr/wḥrh* ‘and he/she will (then) be ritually pure’ should be analyzed as perfect consecutive (rather than participial—which is grammatically possible, but not in this context) and should similarly be looked upon as contextually indicative after a string of contextually jussive verbs included within the preceding instructions (see especially Lev. 11:32; 12:7, 8; 13:6, 34, 58; 14:8, 9, 20, 53; 15:13; 17:15; Num. 19:19; 31:23. Note also the comparable usage in Lev. 15:28; 16:30; 22:7; Num. 19:12; 31:24; 2 Kgs. 5:10, 13 [despite the imperative form]).

16 Since the lack of any kind of ritual element in the Ugaritic hippiatric texts was already emphasized by M. B. Gordon in 1942 (see “The Hippiatric Texts from Ugarit,” *Annals of Medical History* 4 (1942), 406–8; *UHT*, 31), while on the other hand, A. L. Oppenheim has indicated that in Mesopotamian civilization, “there was a certain admixture of what we call ‘magic’ practices, even in therapeutic medicine” (see *Man and Nature*, 645; Oppenheim and Reiner, *Ancient Mesopotamia*², 295), it is noteworthy that this “admixture” referred to by Oppenheim also holds true for the Akkadian hippiatric sections. *BAM* 159, V:42–43 clearly demonstrates this: *ina māši ana ini enzi tušbāt ina šeri tušbašal tašahḥal* “At night, in the sight of the constellation Lyra (i.e., “the she-goat”), you should leave (the concoction of the 23 remedy-components steeped in beer) out overnight; in the morning, you should boil and you should filter (the concoction).” For the identification of MUL-ŪZ = *enzu* ‘she-goat’ with the constellation Lyra, see most recently Erica Reiner, *Enūma Anu Enlil—Tablets 50–51* (Malibu, 1981), 16 and the bibliography cited there; see also *CAD* E, 183; *AHw.*, 222. This constellation was astrologically connected especially with the survival of cattle and the various epidemics associated with them, and this may well be the reason why it was included in the hippiatric sections. The term *būlu* ‘cattle’ may also apply to horses; cf. *CAD* B, 313–15 and the passages cited there, e.g., *BWL* 177:20–23; note also that the *rāsānu*-skin disease (perhaps ‘mange’) also affects *būlu* and that this was the basis of the attempt to interpret the Ugaritic hippiatric symptom *yr’aš* in *UHT*, 32–33. Note finally that the expression *ana ini* ‘in the sight of’ as used with respect to the Lyra constellation has a Biblical parallel in the expression *l’yny ḥsmš ḥz’t* “in the sight of this sun” in 2 Sam. 12:11–12 (cf. Num 25:4), although in the Biblical passages this has come to mean idiomatically “in broad daylight” and has lost all ritual connotation.

17 The term *mašqitu* ‘leather enema bag’ (see *CAD* M/1, 384) occurs exclusively in medical texts and must be kept separate from the common term *mašqitu* ‘watering place; potion, drink’ (even though the latter term also occurs in medical texts with the meaning ‘potion’; see *CAD* M/1, 383). While both terms are derived from *šaqu* ‘to give to drink, irrigate’, the determinative KUŠ for ‘leather’ (which occurs before this term both in *BAM* 159, V:45 and in Küchler, *Beitr.* pl. 2, ii:20—only in *BAM* 159, V:46 is it absent according to *CAD* M/1 384) as well as the contexts in which (KUŠ)*mašqitu* occurs, represent clear evidence that these two nouns must be kept distinct. Contrast *AHw.*, 628, where all three passages are listed together under *mašqitu(m)* “Tränke; Trank” and the KUŠ-determinative is considered a logogram and read *mašak*, the construct of *mašku* ‘skin, leather’. This error has still not been corrected in *AHw.*, 1574.

remedy),¹⁸ into his anus you should pour (it)¹⁹; the enema bag of the horse (should contain) 4 liters of boiled beer (solution)²⁰ per horse.”²¹]. (See also the appendix at the end of this study.)

3. Additions to UHT

a) *Methodology*. The existence of two Akkadian hippiatric sections in *BAM* 159 provides conclusive proof for one of the primary methods adopted in *UHT*, namely comparisons between the Ugaritic hippiatric texts on the one hand and Akkadian medical texts and Mesopotamian plant and drug lists on the other. Such comparisons, previously justified by “a thematic relationship between the Akkadian medical texts (concerning human beings only) [sic!] and the Greek and Latin hippiatric texts . . . convincingly demonstrated by R. Labat in TDP, pp. XLIII–XLV,”²² are now completely confirmed methodologically by the existence of *BAM* 159, V:33–47 with respect to sick horses. The inclusion of these two Akkadian hippiatric sections as part of *BAM* 159 (which otherwise deals exclusively with human ailments)²³ and the identical structure and vocabulary which

18 For this usage of *esēpu* ‘to gather’ in medical texts with reference to the gathering together of remedy-components as part of the preparation of the remedy, see the examples quoted in *CAD* E, 331, and *AHw.*, 249.

19 This is another case of the verb *šapāku* ‘to pour’ being used with respect to the physical pouring of the remedy into the sick horse’s body (in this case via an enema bag). See n. 14 above and §3c below.

20 The “boiled beer (solution)” (*šikaru bašlu*) mentioned in line 47 refers back to lines 41–42: 23 *šammi annūti* 1/3 *SĪLA.TA.ĀM teleqqe ina šikari tulabbak* (for the reading *tu^{la}lab-bak*, see Köcher, *BAM* II, p. XVI and *CAD* L, 8) “Of these 23 drugs, you should take 1/3 *qa* (*qū* = “ca. 0.84 liter”); see *CAD* Q, 290) of each and you should steep (the concoction) in beer.” Note also the connection with lines 42–43, which give instructions concerning the boiling of the concoction (for translation, see n. 16 above).

21 The regular way of indicating “for each one” or “per” is via the Sumerian distributive suffix *TA.ĀM* (see, e.g., R. Borger, *Assyrisch-babylonische Zeichenliste* [Neukirchen-Vluyn, 1978], 96 [#139] and the bibliography cited there), for which see, e.g., *BAM* 159, V: 41–42 quoted in the previous note. The less common usage of *ša ištēn X* ‘for each X’ or ‘per X’ is incidentally referred to in *GAG* §138b (p. 192), where CH §63:53–57 is cited as one of several examples of “die Auflösung der Annexion durch *ša* usw.”: *u BÜR^{KU}.E ešeret kur še’am ša šattim ištī’at imaddad* “and for each *BÜR* (= 18 *IKU* of land), he will measure out ten *kur* of barley per year.” Now this distributive usage of the genitive particle *ša* in our text demonstrates that the *ša*-clause in this construction may appear before the clause referring to the object being measured (such anticipatory usage of *ša* is, of course, well attested for the *casus pendens* construction), even though the order *4 *qa šikaru bašlu ša ištēn sīsē* might perhaps have been preferable from a syntactical point of view.

For further discussion of the relevant constructions and of anticipatory *ša*, see O. E. Ravn, *The So-Called Relative Clauses in Accadian* (Copenhagen, 1941), 14–15, 73–77. Professor J. Klein has kindly suggested to me that perhaps we should compare the BH construction *wyqhw lhm šh lbyl’ bwt šh lbyl’* “Each of them should take a lamb per family, a lamb per household.” Cf. also, e.g., Num. 7:11; 31:4; Deut. 1:23; Josh. 3:12; 18:4; Judg. 20:10; 1 Kgs. 10:22. This BH parallel construction with genitival *l* ‘belonging to’ in a distributive sense is further evidence for the genitival character of distributive *ša* in Akkadian. Finally, compare such time idioms as *ša arhi* ‘per month’, *ša šatti* ‘per year’ and *ša ūmi* ‘per day’, for which see *AHw.*, 1117, and *CAD* A/2, 262. Note, e.g., 5 *šiqil kaspā ša arhi irabbi* “(the debt) increases by 5 shekels of silver per month” (*ADD* 27:5).

22 *UHT*, 3.

23 See above §1. Note also the typological connection between the Ugaritic hippiatric texts and the Greek and Latin hippiatric texts, as first demonstrated by A. M. Honeyman, “Varia Punica,” *American Journal of Philology* 68 (1947), 80–81. See also *UHT*, 2–3. The direct connection on virtually all levels between the Ugaritic hippiatric texts and the Akkadian hippiatric sections of *BAM* 159 now renders all such indirect relationships of secondary importance only.

these two hippiatric sections share with many other Akkadian medical texts dealing with human beings²⁴ must serve as incontrovertible evidence for the correctness of this approach.

b) *The Symptom of Sections 2, 3, 5, and 6 of the Composite Text of UHT*. In the composite text of *UHT*, the symptom of sections 2 and 3 (*hr* “discharges a putrid liquid”—lines 5 and 7)²⁵ and possibly also the symptom of sections 5 and 6 (*y'ihd 'akl* “is seized with ‘pain’”—lines 12 and 15)²⁶ might perhaps be associated with the *kīs libbi*-intestinal disease,²⁷ the treatment of which in sick horses is the subject of both of the Akkadian hippiatric sections of *BAM* 159.²⁸ While no disease names are mentioned in the Ugaritic hippiatric texts and no symptoms are referred to in the Akkadian hippiatric sections, this connection is nonetheless suggested by the following Akkadian medical text listing the (human) symptoms of the *kīs libbi*-intestinal disease:²⁹

šumma amēlu kīs [libbi maruṣ NINDA] libbašu lā imahḥaršu ina pišu utarra tākaltašu usahḥalšu iptanarrū . . .

If a man [suffers] from the *kīs [libbi]*-intestinal disease and his stomach does not retain [food]³⁰ but returns it through his mouth, his stomach causes him piercing pains and he vomits incessantly . . .

The Ugaritic hippiatric symptom *hr* “to discharge a putrid liquid” might well be reflected in the above passage by *iptanarrū* “he vomits incessantly” since there is also some additional independent evidence connecting Akkadian (*h*)*arāru* “to discharge a putrid liquid” and the *kīs libbi*-intestinal disease.³¹ The Ugaritic hippiatric symptom *y'ihd 'akl* “is seized with

24 See, e.g., the parallels discussed in §3b and notes 2, 6, 11, 12, 13, 15, 16, 17, and 18. Only the term *sīsū* ‘horse’ serves to identify these two sections as hippiatric. The *kīs libbi*-intestinal disease, the remedy components and their preparation and the administering of the remedy are all attested in Akkadian medical texts dealing with human ailments. Note especially *AMT* 41,1, IV:1–11 and *AMT* 83,4, both of which deal with human ailments and both of which closely parallel the vocabulary of *BAM* 159, V:37–47, the second hippiatric section (see already Köcher in *BAM* II, p. XV).

25 For this understanding of the Ugaritic hippiatric symptom *hr* on the basis of Akkadian (*h*)*arāru* ‘to discharge a putrid liquid’, see *UHT*, 18, and see also n. 31 below.

26 For the correct understanding of this symptom and especially the term ‘*akl*’ ‘pain’ on the basis of the Akkadian medical usage of *akālu* ‘to consume with pain’, see *UHT*, 25–27; and see also n. 32 below.

27 Note that this disease was originally read **kīs libbi* and derived from the term *kīsum* ‘cooling, cool of the day’ (see *AHw.*, 489, where this disease is translated “Leiberkaltung” and note also that this was Köcher’s reading in *BAM* II, p. XV as well). Never, however, is *kašū* or its derivatives used elsewhere with *libbu* ‘heart’; while, as B. Landsberger has shown, *kašū* in the technical meaning ‘to paralyze limbs and parts of the body, to bind magically’ is relatively well attested with *libbu* ‘heart’ (*CAD* K, 252, and *AHw.*, 455). See especially Landsberger, *The Date Palm and its By-Products according to the Cuneiform Sources* (Graz, 1967), 15, n. 38; *CAD* K, 433 (discussion section); *MSL* IX, 98 (commentary to line 1 [301]).

28 See n. 10 above.

29 Köchler *Beitr.* pl. I, 1:26 as quoted in *CAD* K, 433.

30 This translation, based on a restoration of *NINDA* (= Akkadian *akalu*) ‘food’ is the one adopted in *CAD* K, 433. For similar passages in medical texts referring to the stomach’s inability to retain ‘food’ (*NINDA*) or “food or beer” (*NINDA u KAŠ*), see *CAD* M/1, 58, and L, 166.

31 The point of departure for the understanding and disentangling of the Akkadian verbs *arāru*, *ḥarāru*, *erēru*, and *tarāru* must surely be B. Landsberger’s excursus on this subject in *MSL* IX, 213–22 together with F. Köcher, “*Urruru* (‘am Feuer) dorren’,” *Studies Landsberger*, 323–25; *CAD* A/2, 236–38, 323–24. While much remains uncertain, the following points, which are particularly relevant to the present study, seem reasonably assured:

‘pain’” might conceivably be connected with *tākaltāšu usahḫalšu* “his stomach causes him piercing pains” although the additional available evidence in this case is inconclusive.³²

a) *irrūšu i(h)arrurū* “his bowels discharge a putrid liquid” occurs often in medical texts as a symptom of *šuburru maršu* “a sick anus” (see, e.g., point e below) as well as other mainly internal intestinal diseases (some of which are fatal).

b) *(h)arāru* ‘to defecate’ is used a few times with respect to birds in non-medical passages (see *CAD A/2*, 238, and *MSL IX*, 216 for relevant passages). As noted by Landsberger, “we can only make sense of these lines . . . if we relate them to defecation” (*MSL IX*, 216). In *CAD A/2*, 238, these passages are considered exceptional to the regular meaning “to discharge a(n abnormal) putrid liquid” and it is contended that “only with respect to birds . . . does ‘to defecate’ seem acceptable.”

c) One additional usage of *(h)arāru* ‘to discharge a putrid liquid’ with respect to animals occurs in the sheep-omen text *KAR 422*, r.3: [*šumma*] *ḥašū iḥarrur* “if the lung(s) of the sheep discharge(s) a putrid liquid” followed in the next line by [*šumma ḥaš*] *ū iḥaššūš* “if the lung(s) of the sheep) . . .” where the symptoms *(h)arāru* and *(h)ašāšu* (the latter verb is elsewhere attested in this context, but the suggested meaning “to be thick[?], inflated[?]” is far from certain; see *CAD H*, 138) occur together just as the two diseases *arurtu* and *ašustu* occur together in *Maqlū V:75, 77* and just as both verbs have the same Sumerian correspondence *UR₄.UR₄* (see *CAD A/2*, 238, discussion section and *MSL IX*, 215).

In view of the above, it seems possible to also associate the *kīs libbi*-intestinal disease with this symptom on the basis of the following additional evidence:

d) The *kīs libbi*-intestinal disease is the major internal intestinal disease referred to in the Akkadian medical texts and is considered the *typical internal intestinal disease* in the lexical texts with respect to the *qerbū* ‘intestines’ or the *irru* ‘bowels’, just as the *murūš qaqqadi* ‘headache’ and the *muršu di’u* ‘(a grave head disease)’ are to the ‘head’, the *murūš šinni* ‘toothache’ is to the ‘tooth’, the *murūš libbi* ‘heart ailment’ is to the ‘heart’ and the *murūš ḥašē* ‘lung disease’ is to the ‘lung’. The relevant texts are as follows:

SAG.GIG ZÚ.GIG ŠĀ.GIG: *murūš qaqqadi murūš šinni murūš libbi* (*STT* 161:33–34); [ŠĀ.GIG LIPIS̄.GIG] TU.RA SAG.GIG: [*murūš libbi kīs libbi murūš di’i*] (*CT* 16, 24:8–9); ŠĀ.GIG LIPIS̄.GIG SAG.GIG ZÚ.GIG: *murūš libbi kīs libbi murūš qaqqadi murūš šinni* (*CT* 17, 11:99–100); [MUR].GIG [ŠĀ].GIG [LIPIS̄].GIG: *murūš ḥašē murūš libbi kīs libbi* (*Antagal*, frag. E:4–6). For these four texts as well as other parallel ones, see *CAD M/2*, 224, and *MSL IX*, 98.

e) Immediately after the two hippiatric sections of *BAM 159* referring to the *kīs libbi*-intestinal disease in horses, the next section (V:48–52) refers to another intestinal disease (V:50 *nikmati* ‘bloating?’; see *CAD N/2*, 222) for which *irrūšu i’arrurū* “his bowels discharge a putrid liquid” occurs as one of the symptoms (V:48; here again it should be noted that the two immediately preceding hippiatric sections of *BAM 159* do not contain any symptoms). It seems likely that the similar nature of these two intestinal diseases is the reason for their adjacent juxtaposition (despite the fact that the first two sections refer to horses while the third refers to human beings). See also n. 32 below.

f) Finally, the *arurtu*-disease (which may well be derived from *(h)arāru* ‘to discharge a putrid liquid’; see point c above) occurs in *Maqlū V:75, 77* together with both the *ašustu*-disease and *ḥūš kīs libbi* “the physical pain of the *kīs libbi*-intestinal disease.” For the former, see point c above. For *ḥūš kīs libbi* “the physical pain of the *kīs libbi*-intestinal disease,” see the passages listed in *CAD H*, 260 (reading in medical contexts *ḥūš kīs libbi* instead of *ḥūš ḥipi libbi*) and note that *ḥūš kīs libbi* occurs without the other two diseases but in a very similar context in *Maqlū VII:131*. The term is not to be read *ḥūš ḥipi libbi*. The combination GAZ.ŠĀ in medical contexts must be read *kīs libbi* together with, e.g., *CAD A/2*, 479 [*Maqlū V:75, 77*]; *CAD N/1*, 317 [*TCL* 6, 34, r. 1:10]; and contra, e.g., *CAD A/2*, 324 [*Maqlū V:75, 77*]; *CAD H*, 197 [*TCL* 6, 34, r. 1:10]; R. Labat, *Manuel d’épigraphie Akkadienne*⁵ [Paris, 1976], p. 305 and sign #192. In conclusion, it certainly seems plausible that the Akkadian verb *(h)arāru* ‘to discharge a putrid liquid’ was associated with the *kīs libbi*-intestinal disease and that therefore, the Ugaritic hippiatric symptom *ḥr* *MSL IX*, may well refer to the same disease as do the two Akkadian hippiatric sections of *BAM 159*.

32 As stated in *UHT*, 26, it is “impossible to identify which specific pain is alluded to here [by the Ugaritic hippiatric symptom *y’iḥd’akl* ‘is seized with pain’], except in so far as it is clear that a horse seized with such pain was considered in need of medical treatment.” Nevertheless, the use of the verb *suhḫulu* ‘to cause piercing pains’

c) *The Administering of the Remedy to the Horse*. In the composite text of *UHT*, the third and last part of each of the eight sections is constant, consisting of the same two terms *wyšq b'aph* “and it (the remedy) should (then) be poured into his nose.”³³ This phrase, which is both the most widely attested hippiatric expression in the Ugaritic hippiatric texts and the most widely discussed of all hippiatric phrases (from 1934 to the present), has been dealt with extensively by D. Sivan and me in *UHT*.³⁴ Of the two suggested interpretations—I. “introducing (literally ‘pouring’) the solution through his nose”; II. “placing (literally ‘pouring out’) the solution before the horse (literally ‘by his nose’)”—the former was adopted in *UHT* for the following reasons. First, a Latin hippiatric prescription written by Mago of Carthage “which follows almost the identical structural order as that of the Ugaritic hippiatric texts . . . , prescribes that the application of the remedy must be ‘*per nares infundatur*’ which is the exact equivalent of the first suggested interpretation of the Ugaritic phrase discussed above.”³⁵ Second, “‘solutions’ consisting of medicinal components mixed into the horse’s regular diet in the form of soft pap are to this day forced to the sick horse by introducing it (via a stomach tube) through his nose.”³⁶ The comparison between the Latin hippiatric phrase *per nares infundatur* and the Ugaritic hippiatric phrase *wyšq b'aph* (the first reason immediately above) in favor of interpretation I was labeled “un argument irréfutable” by A. Herdner in 1969.³⁷ The only really significant evidence on behalf of interpretation II was C. H. Gordon’s comparison with the usage of Akkadian *šapāku* “to pour out” in the Akkadian texts dealing with the training of chariot horses. In these texts, the healthy horse’s food is poured out in front of him by the *šāpikat imrī* “pouder of fodder.”³⁸ Thus, it appeared that the Akkadian usage of *šapāku*, the interdialectal equivalent of Ugaritic *yšq* “to pour out,” with respect to horses was indeed in sole agreement with interpretation II above. It is now clear that this conclusion is incorrect. For in both hippiatric sections of *BAM* 159, the remedy is literally “poured” into the horse, in the second section via his anus and in the first section via his left nostril precisely paralleling the Ugaritic phrase *wyšq b'aph* “and it (the remedy) should (then) be poured into his nose.” The Akkadian verb used in both sections is in fact *šapāku* ‘to pour out’. The relevant texts are as follows:

in the ‘stomach’ (*tākaltu*) in the above description of the human symptoms of the *kīs libbi*-intestinal disease is itself quite suggestive. Furthermore, the Akkadian verb *akātu* ‘to consume with pain’ is attested with respect to intestinal pain in *TDP* 112:15 (reading and translating according to *CAD* Q, 226): *šumma . . . qerbūšu . . . ikkalūšu* “If his intestines hurt him” Compare also *BAM* 159, V:48: *šumma amēlu qerbūšu nuppuḫū irrūšu i’arrurū* “If a man’s intestines (feel) swollen, his bowels discharge a putrid liquid” (see n. 31e above). It must be stressed, however, that the above evidence proves only that the Ugaritic hippiatric symptom *y’iḫd’aki* “is seized with pain” (see n. 26 above) could conceivably refer to intestinal pain in general and specifically to the *kīs libbi*-intestinal disease, which is the subject of the two Akkadian hippiatric sections of *BAM* 159.

33 See *UHT*, 9–10, 50, 51.

34 *Ibid.*, 17–18.

35 *Ibid.*, 17.

36 *Ibid.*, 16. This information was kindly provided by Dr. U. Fass, a Ramat-Aviv veterinarian.

37 Andrée Herdner, *Syria* 46 (1969), 132 [Correct the date in the citation of this article in the bibliography of *UHT*, 64]. For further bibliography and discussion, see *UHT*, 17.

38 C. H. Gordon, *Orientalia* 22 (1953), 232. For further bibliography and discussion, see *UHT*, 17–18.

Administering of the Remedy in the First Akkadian Hippiatric Section—*BAM* 159, V:35–36

8 *šammī kīs libbi ša sīsē . . . ina naḥīr šumēlišu tašappakma iballuṭ*

8 drugs for the *kīs libbi*-intestinal disease of horses . . . in his left nostril you should pour and he will (then) recover.

Administering of the Remedy in the Second Akkadian Hippiatric Section—*BAM* 159, V:41–46

23 *šammī annūti . . . ana mašqite tessip ana šuburrišu tašappak*

These 23 drugs . . . into the enema bag you should gather, into his anus you should pour.

Thus, it is now clear that there is no longer any significant evidence in favor of interpretation II, while interpretation I is now supported not by one, but by two irrefutable arguments.

In conclusion, the two hippiatric sections of *BAM* 159 both complement and confirm that which was contended in *UHT* and provide an excellent example of how further ancient Near Eastern textual evidence from the same literary genre (especially from Mesopotamia) may help unravel some of the remaining mysteries of the Ugaritic hippiatric texts.

Appendix: Transliteration and Translation of *BAM* 159, V: 29–52

A. Lines 29–32

29 Ú[] nīnū(Ú.KUR.RA) saḥ-lé-e Ú.UD aban(NA₄) Ú[]

30 [] GIŠ[] murru (IŠ)IMŠEŠ) ṭabti(MUN) emesallim(EME.SAL-[lim])

31 burāšu(ŠIMLI) 9 šammī(Ú) pišu(KA-šú) u na-ḥi-ri-šú būšānu(HAB-nu) šabtū(DAB)

32 ina(AŠ) dišpi(LĀL) ta-kap-pá[r]

(29) []-plant, the *nīnū*-plant, cress, poplar resin, stone (i.e., seed) of []-plant, (30) [of] []-tree, myrrh, sale of fine quality (31) and (a type of) juniper—nine drugs (for when) his mouth and his nostrils are seized with the *būšānu*-disease, (32) with honey you should wipe (them).

Notes (For lines 29, 31–32, see notes 2 and 6 above.)

Line 29. The Akkadian reading of Ú.UD is unknown. The translation “poplar resin” is based especially on *AMT* 40, 5, IV:3 Ú.UD ša A GIŠ.ASAL šumšu “Ú.UD the name of which is (the equivalent of) ‘poplar resin’.” The regular Akkadian term for ‘poplar resin’ is *ḥil šarbati*; see *AOAT* 33, #318; *DAB*, 292–96; *CAD* S, 109.

B. Hippiatric Section I (Lines 33–36)

33 Úzi-im kaspi(KÙ.BABBAR) Úzi-im ḥurāši(KÙ.SIG₁₇) Úār-zal-la

34 urqi(ÚSAR) eqli(A.ŠÀ) Úel-lat eqli(A.ŠÀ) Úk[a-s]u(?)u

35 ÚTUR-a-ni išid/šuruš(SUḤUŠ) ÚTUR-a-ni 8 šammī(Ú) ki-is lib-bi

36 šá sīsē(ANŠE.KUR.RA) ina(AŠ) karāni(GEŠTIN) saḥti(SUR) ina(AŠ) na-ḥir šumēlišu(GÜB-šú) tašappakma(DUB-ak-ma) iballuṭ(TI)

(33) “Lustre of silver”-plant, “lustre of gold”-plant, the *arzallu*-plant, (34) the *urqi eqli*-(wild growing) plant, the *ellat eqli*-(wild growing) plant, the *kasû*-plant, (35) the *TUR-a-nu*-plant and the root of the *TUR-a-nu*-plant—eight drugs for the *kis libbi*-intestinal disease (38) of horses, in (a solution of) wine-must, into his left nostril you should pour and he will (then) recover.

Notes (For lines 35–36, see above with notes 6, 10–15, 27.)

Line 34. For the *kasû*-plant as one of the 23 drugs in hippiatric section 2, see line 41 below. While it is true that this plant is usually represented logographically as GAZI^{SAR} (as in line 41 below), it is occasionally written syllabically in medical texts as in *AMT* 57, 5:rev. 7: *Úka-si-i*. While this restoration is far from certain, it seems the best one possible.

Line 35. While the Akkadian reading of the *TUR-a-nu*-plant is unknown, it is clear that this plant is somewhat similar to the *ḫaltappānu*-medicinal plant and the *ḫašû*-plant, which yields seeds used as a spice. For the latter as one of the 23 drugs in hippiatric section 2, see line 40 below. See *DAB*, 203, 206; *CAD* H, 52, 144; *AHw.*, 314, 335.

C. Hippiatric Section 2 (Lines 37–47)

- 37 GIŠ^e-re-nu šurmēnu(GIŠŠUR.MÏN) GIŠdáp-ra-nu asu(^{ŠIM}GÍR) šimeššalû(^{ŠIM}.SAL)
 38 qanû(GI) ṭābu(DÜG.GA) ballukku(^{ŠIM}BAL) nikiptu(^{ŠIM} dMAŠ) su'ādu(^{ŠIM}MÏN.DU)
 atā'išu(^ÚKUR.KUR)
 39 kukru(^{ŠIM}GÚR.GÚR) burāšu(^{ŠIM}LI) kikkirānu(^{ŠIM}ŠE.LI) pešû(BABBAR)
 šumlalû(^{ŠIM}GAM.MA)
 40 ḫašû(^ÚḪAR.ḪAR) Úsi-ḫu GIŠár-gá-nu barīrātu(GIŠLUM.ḪA) uḫūlu(NAGA) qarnānû(SI)
 41 nuḫurtu(^ÚNU.LUḪ.ḪA) ṭabtu(MUN) saḫ-lé-e kasû(GAZI^{SAR}) 23 šammī(^ÚḪI.A)
 annūti(ŠEŠ)
 42 1/3(ŠUŠANA) qa(SÌLA.TA.ÀM) teleqqe(TI-qé) ina(AŠ) šikari(KAŠ) tu-^{la}lab-bak ina(AŠ)
 mūši(MI)
 43 ana(DIŠ) ini(IGI) enzi(^{MUL}ÚZ) tuš-bat ina(AŠ) še-rì tušabšal(ŠEG₆-šal) ta-šá-ḫal
 44 ziqip/ḫabbūr(ŠE.DÙ) irri(^ÚUKÚŠ.LAGAB) Ú[]^{MEŠ} tasāk(SÚD) itti(KI) 1 qa(SÌLA)
 dišpi(LÁL)
 45 11 qa(SÌLA) šamni(Ì.GIŠ) taḫaššal([K]UM) ana(DIŠ) ^{KUŠ}maš-qí-te te-sip
 46 ana(DIŠ) šuburrišu(DÚR-šú) tašappak(DUB-ak) maš-qí-tu ša sisê(ANŠE.KUR.RA)
 47 ša ištēn(1-en) sisê(ANŠE.KUR.RA) 4 qa(SÌLA) šikaru(KAŠ.SAG) ba-áš-lu

(37) Cedar, cypress, (type of) juniper, myrtle, (type of) box-tree, (38) “sweet” reed, *ballukku*-resin, the *nikiptu*-plant, (type of) elder-tree, the *atā'išu*-plant, (39) the *kukru*-aromatic plant, (type of) juniper, the *kikkirānu*-aromatic substance of white color, the *šumlalû*-aromatic plant,

(40) the *ḫašû*-aromatic plant, wormwood (*artemisia*)(?), the *argānu*-conifer resin, *sagapenum*(?), “horned” alkali, (41) the *nuḫurtu*-plant, salt, cress, and the *kasû*-plant—these 23 drugs, (42) one-third liter of each you should take, in beer you should steep; at night, (43) in

the sight of the constellation Lyra (i.e., the “she-goat”) you should leave (the concoction) overnight; in the morning you should boil and you should filter (the concoction); (44) shoots/branches of colocynth(?) and the []-plant you should pulverize, together-with one liter of honey and (45) eleven liters of oil you should pound; into the leather enema bag you should gather (the remedy), (46) into his anus you should pour (it); the enema bag of the horse (47) (should contain) four liters of boiled beer (solution) per horse.

Notes (For lines 41–43 and 45–47, see above with notes 6, 16–21.)

D. *Lines 48–52*

- 48 šumma(DIŠ) amēlu(NA) qerbūšu(ŠÀ^{MEŠ}-šú) nuppuḫū(SAR^{MEŠ}-ḫu) ir-ru-šú i-ár-ru-ru ir-ru-šú
 49 ištānassû(KA.KA.-ú) šāru(IM) ina(AŠ) libbišu(ŠÀ-šú) i-le-eb-bu ina(AŠ) šuburrišu!(DÚR!-šú) ú-na-kap
 50 amēlu(NA) šú(BI) nik-ma-ti maruṣ(GIG) ana(DIŠ) bulluṭišu(TI-šú) atā'išu(ÚKUR.KUR) Úti-ya-tú
 51 irrû(ÚKUR.Š.LAGAB) ṭabti(MUN) emesallim(EME.SAL-lim) aban(NA₄) ga-bi-i 5 šammī(Ú^{HI.A}) annūti(ŠEŠ)
 52 ina(AŠ) mē(A^{MEŠ}) tu-lab-bak ana(DIŠ) šuburrišu(DÚR-šú) tašappakma(DUB-ak-ma) iballuṭ(TI)

[end of column]

(48) If a man's intestines (feel) swollen, his bowels discharge a putrid liquid, his bowels (49) rumble incessantly, the wind in his belly rumbles and in his rectum . . . (50)—this man suffers from “bloating”(?). In order to heal him: the *atā'išu*-plant, the *ūyatu*-plant, colocynth(?), salt of fine quality, and alum—these five drugs (52) in water you should steep, into his anus you should pour, and he will (then) recover.

Notes (For lines 48, 50, and 52, see notes 2, 25, 31, and 32 above.)

Line 49. For this emendation from the text's KI-šú (𒀭𒀭𒀭𒀭) to DÚR-šú (𒀭𒀭𒀭𒀭) = *šuburrišu* ‘his rectum’, see *CAD* N/2, 222, and note the occurrence of this term in line 52 of this section.