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### 3 *Umṣatu* in omen and medical texts: An overview

**Abstract:** The aim of the present study is to analyse the different types of texts in which the Assyro-Babylonian word *umṣatu* is attested. It probably denotes a skin mark and/or lesion, generally occurring on different parts of the body (of men, women, and sometimes also newborn children). This term is present not only in omen texts (physiognomic, teratologic, and terrestrial), but also in medical texts (both diagnostic and therapeutic). By analysing them, the present article will propose a more detailed interpretation of the word, so as to obtain a clearer idea of the type of skin problem indicated by *umṣatu*.

**Keywords:** *umṣatu*, skin mark/lesion, omens, medical texts

## Introduction

The word *umṣatu*<sup>1</sup> probably indicates a skin mark and/or lesion, commonly appearing on adults (both male and female) and sometimes also on newborn children. It occurs especially in *omina* (in particular those belonging to the physiognomic type), and in a few cases also in medical texts (both diagnostic and therapeutic). Its translation – as for other skin issues<sup>2</sup> – has always been problematic. Modern scholars have proposed many widely differing interpretations, such as those of H. Holma<sup>3</sup> and E. Ebeling<sup>4</sup> who translated *umṣatu* as “Brandmal” (Eng. brand) and “Aussatz” (Eng. leprosy) respectively, or those of P.B. Adamson<sup>5</sup> (*pigmented naevus*), and J. Scurlock and B.R. Andersen,<sup>6</sup> and also Geller<sup>7</sup> (“haemorrhoids”).

The aim of the present article is to examine the different kinds of texts in which *umṣatu* is attested, in order to offer a more detailed analysis of the term. The examples and charts given – based on the most recent text editions – will help to record some of the characteristics of this mark/lesion, especially those related to the body parts on

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1 CAD U/W, 135; AHw, 1418.

2 See, for example, the article by Geller “Skin Disease and the Doctor” (JMC 15, 2010).

3 Holma 1913, 6.

4 Ebeling 1928–1932, 321.

5 Adamson 1984, 8.

6 Scurlock/Andersen 2005, 148–150, 152, 207, 230, 241.

7 Geller 2005. In his article “Nieren-, Darm- und Afterkrankheiten”, however, he translates it as “Geschwür” (Geller 2010, 67).

which it might appear, in an attempt to gain a better understanding of the kind of skin problems that *umṣatu* might refer to.

## Umṣatu in omina

For the Assyro-Babylonians, the act of divination was fundamental;<sup>8</sup> thanks to its arts, professionals (the intermediaries between gods and mankind)<sup>9</sup> were able to read, decipher, and interpret the coded messages (or signs)<sup>10</sup> left both in the sky and on earth<sup>11</sup> by deities. Divination was divided into many disciplines, which dealt with very different phenomena.<sup>12</sup>

The word *umṣatu* is found especially in omens related to a man's appearance, and sometimes in those concerning unusual births and common occurrences of daily life, as explained in the following paragraphs.

## Physiognomic omina

The most ancient examples of omens relating to *umṣatu* date from the beginning of the 2nd millennium BC, and consist of four physiognomic tablets – Si 33 (TBP 62), YBC 4646 (YOS 10 54), YBC 5074 and VAT 7525 (YOS 10 55).<sup>13</sup> According to these texts, *umṣatu* might be observed all over the body, or in particular on some of its parts, as the following lines show:

- (1) DÍŠ LÚ SAMAG-*tim ma-li i-na da-an-na-tim [a-ka-lam ik-kal]*  
DÍŠ LÚ SAMAG-*tim šu-tu-qá-tim ma-li la tú-ub li-ib-bi*

‘If a man is covered with *umṣatus*, he will have bread to eat in a famine.  
If a man is covered with deeply-cut *umṣatus*, unhappiness.’<sup>14</sup>

<sup>8</sup> See, for instance, Noegel 2010, 147.

<sup>9</sup> See, for example, Lambert 1957, 1–14 and Lenzi 2008, 57.

<sup>10</sup> See Lenzi 2008, 67 and Koch 2005.

<sup>11</sup> The following passage from the “Diviner’s Manual” is famous: “The signs on earth just as those in the sky give us signals. Sky and earth both produce portents though appearing separately, they are not separate (because) sky and earth are related. A sign that portends evil in the sky is (also) evil on earth, one that portends evil on earth is evil in the sky” (Oppenheim 1974, 204, ll. 38–42).

<sup>12</sup> For a classification of the arts of Mesopotamian divination, see Maul 2003, and Rochberg 1999.

<sup>13</sup> See the recent translation by Böck (2000, 296–305), and also Bottéro (1984, 174–176), Köcher/Oppenheim (1957–58, 63–67).

<sup>14</sup> See Böck 2000, 301–303, ll. 2–3, and Köcher/Oppenheim 1957–58, 66, ll. 11–12.

- (2) BE SAMAG *i-na ap-pi-i-šú* GAR *qá-bi le-mu-tim ir-ta-na-a-a[d-di-šú]*

‘If an *umṣatu* is located on his nose, bad speech will continually pursue him.’<sup>15</sup>

- (3) [i-n]a *tu-li* [Ú.GÍ]R *šu-me-lam* KI DINGIR *šu-uk-lu<sub>4</sub>-ul*  
[i]-na *tu-li* [Ú.GÍ]R *e-mi-tam* KI DINGIR-šú *sà-ki-ip*

‘An *umṣatu* on the breast, left: he is perfect with (his) god.  
An *umṣatu* on the breast, right: he is rejected by his god’<sup>16</sup>

The majority of textual material from physiognomic omens featuring *umṣatu*, however, dates to the 1st millennium BC,<sup>17</sup> and belongs to the series known from its incipit as *Šumma alamdimmû* “If the form”,<sup>18</sup> which is devoted to the analysis of a person’s appearance. Probably composed of 27 tablets and divided into 5 parts,<sup>19</sup> it seems to have been rearranged and edited during the 11th century BC by Esagil-kīn-apli,<sup>20</sup> who ordered the material according to the principle “from head to foot” (*ištu muḥḥi adi šēpi*).<sup>21</sup> *Omina* concerning *umṣatu* are present in various sections of the series, often in sequences listing cases related to different kinds of marks and lesions.

In the following examples from the 1st subseries, *omina* concern the life and death, wealth and poverty of a man who has *umṣatu* on his face:

- (4) DIŠ *ḥa-li-e* MIN *ina tū-ub* LA-šú UG<sub>7</sub>,  
DIŠ MIN *pu-ul-lu-šú* NA BI NÍG.TUKU-šú ÚKU-*in*  
DIŠ *kít-ta-bru* MIN É NU DÛ ḪUL *ina É* AD-šú ZĀḪ  
DIŠ *um-ša-ti* MIN NÍG.TUKU.MEŠ IBILA *za-kir* MU TUKU-ši

<sup>15</sup> See Böck 2000, 297, l. 14, and Bottéro 1974, 174, l. 14.

<sup>16</sup> Böck 2000, 303, ll. 9–10, and 2010, 205. See also Böck 1999, 61.

<sup>17</sup> The majority of such texts come from the renowned libraries of Esarhaddon and Assurbanipal at Nineveh. Other copies have been found at Assur, Nimrud, Sultantepe, Babylon, Sippar, Kiš, Uruk and Ur (see Böck 2000, 7–9, and 2010, 200).

<sup>18</sup> The edition of the complete standard series has been published by Böck (2000). In general see, among others, Böck 2010, Heeßel 2010a and Koch 2015.

<sup>19</sup> The first part (*šumma alamdimmû*) describes signs occurring on the whole body. While the second and third subseries (*šumma nigdimdimmû* and *šumma kataduggû*) are devoted to omens regarding a man’s behaviour and speech, respectively, the fourth (*šumma sinništu qaqqada rabât*) considers omens related to features occurring on a woman’s body. The fifth and last part (*šumma liptu*) examines marks, moles, warts and the like appearing all over the body.

<sup>20</sup> He was the *āšipu* of the Babylonian king Adad-apla-iddina (1068–1047 BC). See Finkel 1988, Böck 2000, Heeßel 2000, 104 and 2010a, 140, Rutz 2011.

<sup>21</sup> He applied this schema – already used in the Sumerian list UGU.MU – to medical texts for the first time, as he emphasizes in his *Catalogue* while explaining the new edition he made of both *šumma alamdimmû* and SA.GIG (see Heeßel 2000, 109).

‘If DITTO (=his face is full of) *ḫalûs*, he will die in the prime of his life.

If DITTO (=his face) is pierced with (*ḫalûs*), this man will become poor despite his wealth.

If DITTO (=his face is full of) *kittabrus*, he will not build a house (and) evil will disappear from the house of his father.

If DITTO (=his face is full of) *umṣatus*, he will obtain riches, (and) a heir who will invoke (his) name.’<sup>22</sup>

- (5) DIŠ *ina* UGU *pa-ni-šú* ZAG *um-ša-tum* DINGIR-*ni* LÚ.BI ÚKU  
DIŠ GÛB MIN NA.BI SIG<sub>5</sub> IGI : U<sub>4</sub>.MEŠ-šú *qer-bu*

‘If on the upper part of his face, on the right, (there is) an *umṣatu*, he is blessed by a god, this man will be poor.

If DITTO (=on the upper part of his face), on the left, (there is an *umṣatu*), this man will see good things; *var.* his days will be near.’<sup>23</sup>

In the subseries *šumma sinništu qaqqada rabât* – which contains omens concerning the bodies of women – there are also cases related to *umṣatu*. In the following lines, for instance, its presence is observed on the ears, the navel, and the nipples:

- (6) DIŠ GEŠTUG 15-šá SAMAG SA<sub>5</sub> GAR-*at* *muš-te-na-at mu-sap-pi-⟨ḫa⟩-at*  
DIŠ 150 MIN *muš-te-na-at [ta]-ar-ša-at*  
DIŠ GEŠTUG 15-šá SAMAG SIG<sub>7</sub> GAR-*at* *muš-te-na-at u mu-sap-⟨pi⟩-ḫat*  
DIŠ GÛB MIN *bi-šit* GEŠTUG-šá ZÁḪ

‘If her right ear has a red/brown *umṣatu*: she is nubile, (but) she is wasteful.

If her left DITTO (=ear has a red/brown *umṣatu*): she is nubile, she is honest.

If her right ear has a yellow/green *umṣatu*: she is nubile, but she is wasteful.

If her left DITTO (=ear has a yellow/green) *umṣatu*: she will lose her focus of attention.’<sup>24</sup>

- (7) DIŠ SAMAG BABBAR GAR-*at* MÍ.BI GISKIM-šú *lem-ne-et*  
DIŠ SAMAG GE<sub>6</sub> GAR-*at* MIN SIG<sub>5</sub>-*at*

‘If (a woman) has a white *umṣatu* (on her navel), as for this woman, her omen is bad.

If (a woman) has a black *umṣatu* (on her navel), DITTO (= as for this woman, her omen) is good.’<sup>25</sup>

<sup>22</sup> Böck 2000, 109, ll. 8–11.

<sup>23</sup> Böck 2000, 115, ll. 111–112.

<sup>24</sup> Böck 2000, 153, ll. 4–7, and 2010, 206. She renders the last line as “sie wird unaufmerksam sein”.

<sup>25</sup> Böck 2000, 165, ll. 197–198.

## (8) DIŠ SAMAG.MEŠ DIRI [NU MIN?]

‘If *umṣatus* fully cover (her nipples), [DITTO (= she is barren)].’<sup>26</sup>

In the 5th and last subseries – entitled *Šumma liptu* “If a spot (on the skin)” and devoted to the observation of marks, moles, warts, and lesions appearing all over the human body – there is one entire chapter (*Šumma umṣatu* “If an *umṣatu*”), unfortunately not completely preserved, dedicated to the examination of this particular mark/lesion. Its presence is attested in different areas of the body, but especially on the head; indeed, it is worth noting that 95 of the tablet’s 156 entries concern signs occurring there.<sup>27</sup>

(9) [DIŠ S]AMAG *ina* SAG.DU LÚ ZAG GAR ḪUL ŠÀ GIG *di-ḫu ana* IGI-šú GAR KIMIN *du-us-su* KAR-ir

DIŠ GÛB : MURUB<sub>4</sub> SAG.DU GAR *ki-lum* GIG *iš-šar-rak-šú*

DIŠ SAG.DU-*su ma-la-a* ḪUL GIG *uḫ-tam-maṭ-su ma-la-a* ÍL.MEŠ

‘[If *u*]*mṣatu* is located on the right side of a man’s head: before him will lie destruction of the heart, sickness, and *di’u*-illness; *var.* his potency will be taken away.

If (*umṣatu* is located) on the left side, *var.* in the middle (of a man’s head): painful imprisonment will be given to him.

If his head is full (of *umṣatus*), hate will continually make him restless, he will continually wear dishevelled hair (as if in mourning).’<sup>28</sup>

The head is analysed not only as a whole, but also in its various parts, such as the forehead, the back of the head (occiput?), hair, eyes, nose, mouth, lips, tongue, etc. Some examples follow:

(10) [DIŠ *ina*] SAG SAG.KI-šú GAR *šá ú-ša-am-mar* KUR-ád

[DIŠ *ina*] SAG.KI ZAG GAR <sup>mi</sup>KALA.GA DAB-*su qa-lal* LÚ

[DIŠ *ina* SAG].KI GÛB <sup>mi</sup>KALA.GA EN INIM-šú DAB-*bat* [...] x IGI

‘[If (*umṣatu*)] is located [on] the upper part of his forehead: he will achieve what he has been striving for.

[If (*umṣatu*)] is located [on] the right side of the forehead: he will be seized by hard times. Disrepute of the man.

<sup>26</sup> Böck 2000, 163, l. 170, and 2010, 203.

<sup>27</sup> On the importance of the head in medical texts in general, and in SA.GIG in particular – the diagnostic series generally listed together with *Šumma alamdimmū* – see Heeßel 2010c, 45–46, and 2004, 103.

<sup>28</sup> Böck 2000, 185, ll. 1–3, and 2010, 209. For parallels, see VAT 11982, published by Heeßel (2007, 124, Text no. 52).

[If (*umṣatu*)] is located [on] the left side [of the fore]head: hard times will seize his adversary [...].<sup>29</sup>

- (11) [DIŠ *ina* KI.T]A IGI 15 GAR DUMU.MEŠ-šú DINGIR NU [TUKU.ME]Š  
DIŠ *ina* KI.TA IGI 150 GAR DUMU.MEŠ-šú DINGIR T[UKU.M]EŠ

‘[If (*umṣatu*)] is located [belo]w his right eye, his sons [will not hav]e a god.  
If (*umṣatu*) is located below his left eye, his sons wil[l hav]e a god.’<sup>30</sup>

- (12) DIŠ *ina* UGU EME 15 GAR *ina* ŠUB KA DAB-*bat*  
(...)

DIŠ *ina* KI.TA EME 150 GAR *i-tam-ma-ma* DINGIR NU DIB-*su*

‘If (*umṣatu*) is located on the surface of his tongue on the right side, he will be overwhelmed by blasphemy.

(...)

If (*umṣatu*) is located below his tongue, he will swear and a god will not seize him.’<sup>31</sup>

After the section devoted to the head, the chapter – unfortunately very fragmentary in this part – examines cases in which *umṣatu* occurs on other areas of the human body, such as the region of the clavicles, the navel, the belly, and so on. In the following lines, for instance, it appears on specific areas of the feet:

- (13) DIŠ *ki-ša-al-la-šu* DIRI.MEŠ *me-si-ir* N[Á DAB-*su*]  
DIŠ *ina a-si-id* ĞIR ZAG GAR *a-da-an da-ma-qí-šú* KI<sup>d</sup>UTU *úḫ-ḫur* : *ap-pu-ti piš-ti*

‘If (*umṣatus*) fully cover his ankles, he will be confined to bed.

If (*umṣatu*) is located on the heel of his right foot, the time of his health will be delayed by Šamaš, *var.* difficult situation, insult.’<sup>32</sup>

## Other kinds of *omina*

Apart from the physiognomic omens, some occurrences of *umṣatu* may be found in other types of *omina*, for instance in *Šumma izbu*<sup>33</sup> “If an *izbu*”,<sup>34</sup> devoted to the

<sup>29</sup> Böck 2000, 185, ll. 11–13.

<sup>30</sup> Böck 2000, 187, ll. 31–32.

<sup>31</sup> Böck 2000, 189, ll. 70 and 73, and 2010, 202.

<sup>32</sup> Böck 2000, 193, ll. 146–147, and 2010, 202.

<sup>33</sup> See De Zorzi 2014 and Leichty 1970.

<sup>34</sup> The term identifies the “malformed newborn human or animal” (CAD I/J, 371). Cf. also AHw, 408 (“Missgeburt”).

observation of unusual births and malformations in human and animal fetuses. The standard edition of the teratologic series – found in the library of the Neo-Assyrian king Assurbanipal (7th century BC) – is composed of 24 tablets, and divided into 4 parts.<sup>35</sup> In the first part, which is dedicated to the malformations of children, there is an omen relating to the presence of *umṣatu* all over the body of a newborn baby:

(14) [BE SAL Û.TU-*ma* KIMIN-*ma*] *um-ša-tú* DIRI É BI ÚKU

‘[If a woman gives birth and DITTO (= at birth) (the child)] is full of *umṣatus*, that house will become poor.’<sup>36</sup>

A case of people affected by *umṣatu* is attested also in the terrestrial omen series *Šumma ālu ina mēlê šakīn* “If a city is set on a height”,<sup>37</sup> which deals with many aspects relating to ancient Mesopotamians’ daily lives, and more precisely in a list of omens regarding various types of skin lesions and diseases:

(15) [DIŠ *ina*/TA É] LÚ *ša* NIR.DA SA<sub>5</sub> GÁL-*ši e-neš* É LÚ

[DIŠ KI.MIN] *ša* SAḪAR.ŠUB.BA SA<sub>5</sub> GÁL-*ši* KI.MIN

[DIŠ KI.MIN] *aš um-ša-ti* SA<sub>5</sub> GÁL-*ši* KI.MIN

[DIŠ KI.MIN] *ša a-ga-nu-ti- $\langle$ la $\rangle$*  SA<sub>5</sub> GÁL-*ši* KI.MIN

‘[If, in] a man’s [house], there is someone full of “punishment”,<sup>38</sup> weakening of the man’s house.

[If, DITTO], there is someone full of the *saḫaršubbû*-disease, DITTO.

[If, DITTO], there is someone full of *umṣatu*, DITTO.

[If, DITTO], there is someone full of *aganutillu*, DITTO.’<sup>39</sup>

**35** The first part (tablets 1–4) contains *omina* concerning malformations of newborn children. The second (tablet no. 5) is dedicated to newborn sheep that resemble lions. The third (tablets 6–17) and the fourth parts (tablets 18–24) are devoted to the malformations of sheep, and on malformations, appearance and behaviour of animals, respectively (see De Zorzi 2014, 38–41; Leichty 1970, 2–7).

**36** De Zorzi 2014, 441, Tab. IV, l. 2, and Leichty 1970, 66, Tab. IV, l. 2. The protasis has a parallel in MDP 57, 9: 5.

**37** The series – standardized during the 7th century BC – is composed of 107 tablets that deal with an extensive range of subjects, which “gives the series almost the scope of an encyclopaedia of the physical surroundings and common occurrences of daily life in ancient Mesopotamia” (Freedman 1998, 2). See also HeeBel 2007.

**38** The Sumerogram NIR.DA has been read by CAD N/2: 174 as *nerdû* “sin”, and Š/2: 324 as *šertu* “punishment”. Freedman (1998, 309, l. 20) translates it as “divine punishment”.

**39** See Freedman 1998, 310–311, ll. 20–23, and HeeBel 2007, 24–26. ll. 11’–14’. It is important to note that Freedman’s interpretation (1998, 310–311, l. 22) *ša kiššati* has been corrected to *ša umṣati* – based on VAT 9900+VAT 11322 – by HeeBel (2007, 25–26, l. 13’).

So as to give a more complete overview of the omen texts considered above,<sup>40</sup> the following chart lists some specific aspects concerning *umṣatu*, like the area of the body (of men, women, or babies) on which it might be observed, and, when recorded, the colours<sup>41</sup> which it might take on:

Tab. 1

Text	Lines	Body's area	Man	Woman	Child	Colour
YOS 10 54	1–3 (fragmentary)	Back of the head (occiput?)	x			
	4–6	Forehead	x			
	7–13	Eyes region	x			
	14	Nose	x			
	15–16	Eyes region	x			
	17–18	Cheek	x			
	19	Nose	x			
	20–21	Cheek	x			
	22–27	Tongue	x			
	28–30	Chin	x			
	31–?	Neck	x			
	?–49	Hands	x			
	50–51	Genitalia	x			
	52–55	Penis, testicles	x			
	56	Thigh	x			
	57	Anus	x			
	58–59	Thigh	x			
	60–61	(Lower) abdomen	x			
	62–63	Thigh	x			
	64–67	Shin	x			
	68–69	Feet	x			
	70–71?	Ankle	x			
	75–77?	Ears	x			

<sup>40</sup> It is worth noting that *umṣatu* is also considered as a mark in extispicy (see Koch 2005, 104, Tab. 1, l. 109).

<sup>41</sup> On colours in Mesopotamia, see in particular Landsberger 1967, and among others Verderame 2004. Furthermore, for an interesting observation about colours from an ethno-linguistic perspective, see Cardona 2006, 97–103.

(continued)

Text	Lines	Body's area	Man	Woman	Child	Colour
YOS 10 55	2–5	Body (in general)	x			
TBP 62	9–12	Breast	x			
	13–24	Arms region	x			
	25–26	Ribs	x			
	27–30?	(Lower) abdomen	x			
	31–32	Glans	x			
	33–34	Thigh	x			
	35–36	?	x			
	37–38	Legs region	x			
	39–40	Groin	x			
	41–48 (fragmentary)	?	x			
<i>Šumma alamdimmû</i>	<i>Šumma alamdimmû V</i>	31 (fragmentary)	Nose	x		
		11	Face	x		
		111–112	Face	x		
		142–143	Face	x		
	<i>Šumma alamdimmû X</i>	95–96 (fragmentary)	Glans	x		
		101 (fragmentary)	Penis	x		
		3–9	Ears		x	
		150	Shoulder blade (scapula)		x	
		151	Hips/waist		x	
		170	Nipples		x	
	182–183	Hypogastric region		x		
	197–200	Navel		x		white; black; red/brown

(Continued)

Text	Lines	Body's area	Man	Woman	Child	Colour
	252	The whole body		x		
<i>Šumma sinništu qaqqada rabât V</i>	14 (fragmentary)	?		x		
	15–16 (fragmentary)	Genitalia		x		
<i>Šumma liptu – Šumma umšatu</i>	1–3	Head	x			
	4–5	Hair	x			
	6–10	Back of the head (occiput?)	x			
	11–?	Forehead	x			
	30?–40?	Eyes	x			
	41–59	Nose (and its parts)	x			
	60–68	Mouth?	x			
	69–83	Tongue	x			
	84–95	Lips	x			
	96–98	Clavicles	x			
	99–?	Neck	x			
	?–126	Navel	x			
	127–?	Hypogastric region	x			
	?–138?	Penis, testicles	x			
	?–146	Ankle	x			
	147–156	Feet (and its parts)	x			
<i>Šumma izbu</i>	IV	2	Body (in general)		x	
<i>Šumma ālu</i>	XXI	22	Body (in general)	x		

<sup>a</sup> While AHW 964 interprets it as “Viereck; Unterleib”, CAD R 321 does not offer a definite translation (“a part of the body”).

The contents of this chart together with the examples discussed above demonstrate that *umšatu* might be present on almost every part of the human body, of both

male and female adults, and in one case of a newborn child. It is mostly attested on the head – especially of men – and in the genital region of both men and women. In a few cases the colour which it might acquire is also described: on a woman’s ears it may be red/brown or yellow/green, and on a woman’s navel white, black or red/brown. In the texts examined above it does not seem to have particular characteristics, except in the Old Babylonian text TBP 62 (ll. 3–5), where it is specified that it is “deeply cut” and “moist”. Otherwise, only the place where it occurs is specified – left, right, on both sides, and so on – focusing on the decipherment of the messages left by the gods. As a matter of fact, divination “is certainly a practical means of obtaining otherwise inaccessible information perceived by its users as coming from supernatural or superhuman forces”.<sup>42</sup> In particular, the human body, which was created from clay, the same material as writing tablets, was believed to be a clay tablet itself, on which divinities could write positive or negative signs<sup>43</sup> that referred to the individual’s future or present. Thus it is not surprising that we don’t have descriptions of *umṣatu* per se, but rather information about its presence on the body.

## Umṣatu in medical texts

The whole corpus of Assyro-Babylonian medical texts can be divided into three main categories: diagnostic, pharmaceutical, and therapeutic. The first group offers brief descriptions of symptoms followed by the diagnosis – which gives either the name of the disease or, in some cases, the aetiology – and sometimes by a prognosis, while the second group deals with information about plants, stones and minerals, and their curative effects. The third category mostly offers different kinds of prescriptions for curing the patient, in some cases followed by prayers, incantations, and/or instructions for ceremonial rituals.

A few cases regarding *umṣatu* are attested in both diagnostic and therapeutic texts, as explained in the following paragraphs.

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<sup>42</sup> Koch 2015, 3.

<sup>43</sup> See, for example, Bahrani 2008, 74.

## Diagnostic texts

The word *umṣatu* is also present in SA.GIG<sup>44</sup> “Symptoms”,<sup>45</sup> the diagnostic series probably reorganized and edited by Esagil-kin-apli, also the author of *Šumma alamdimmû*.<sup>46</sup> The series – composed of 40 tablets, and divided into 6 parts – deals with diagnoses and prognoses assigned according to symptoms observed on the human body.

The first example relating to *umṣatu* is on tablet no. 33,<sup>47</sup> and concerns the diagnosis of *nipištu*, probably a skin lesion or disease<sup>48</sup>:

(16) DIŠ GIG GAR-šú GIM *um-me-di u* DIŠ È-su SAMAG DAB-bat *ni-piš-tum* MU.NI

‘If the nature of the illness is like *ummedu*, and if *umṣatu* seizes its exit, its name is *nipištu*.’<sup>49</sup>

The other example is from tablet no. 36, dealing with pregnant women:

(17) DIŠ SAMAG.MEŠ BABBAR.MEŠ DIRI SI.SÁ PEŠ<sub>4</sub>-át  
DIŠ SAMAG.MEŠ SA<sub>5</sub>.MEŠ DIRI NU SI.SÁ PEŠ<sub>4</sub>-át  
DIŠ SAMAG.MEŠ GI<sub>6</sub>.MEŠ DIRI NITA PEŠ<sub>4</sub>-át

‘If it (=the tip of a woman’s breast) is fully covered with white *umṣatus*, the delivery will be easy.

If it is fully covered with red/brown *umṣatus*, the delivery will not be easy.

If it is fully covered with black *umṣatus*, she is pregnant with a male child.’<sup>50</sup>

<sup>44</sup> The first subseries (*enūma ana bīt marši āšipu illaku*) interprets the signs that could be observed by the *āšipu* while going to the house of the patient. The second (*ana marši ina teḥēka*) concerns symptoms appearing on the body. The third and the fourth subseries (*šumma ūm ištēn marišma šikin lipti* and *šumma miqtu imqussuma sakikkī*) are respectively devoted to the duration of illnesses and their symptoms, and to cases of epilepsy, while the fifth subseries (*šumma šētu imḥussuma*) concerns the symptoms related to *šētu*. The last part (*šumma ālittu arātma*) deals with pregnant women and newborn children. See, in particular, Labat 1951, Stol 1993, Heeßel 2000, 19; 2010a, 16, Scurlock/Andersen 2005, 575–677, Attinger 2008, 33, and Koch 2015, 279.

<sup>45</sup> The meaning of SA.GIG (or *sakikkū*) has been interpreted in many ways by modern scholars. For an in-depth analysis, see in particular Heeßel 2000, 95–96, and Böck 2014, 27. Scholars have been debating for decades whether SA.GIG belongs to medical or divinatory texts. See, for instance, Stol 1991–1992, 49, Heeßel 2000, 3, Böck 2000, 3, n. 22, who propose that the diagnostic series should not be considered as an omen series, but rather as a “diagnostic handbook”, and Koch (2015, 274), who states that it belongs to the omen literature, because the procedure followed by *āšipus* was perceived as divinatory.

<sup>46</sup> See the paragraph above on physiognomic omens.

<sup>47</sup> This is the only SA.GIG tablet that names the diseases following the schema “If the nature of the illness is so and so, then its name is so and so” (see Heeßel 2000, 34).

<sup>48</sup> CAD N/2 247, AHW 778. See also Scurlock/Andersen 2005, 241.

<sup>49</sup> Heeßel 2000, 354, l. 17, Scurlock/Andersen 2005, 241, no. 10.182, Scurlock 2014, 236, l. 17.

<sup>50</sup> Adamson 1984, 15, n. 43, Scurlock/Andersen 2005, 230, nn. 10.120 and 10.121, Scurlock 2014, 249, ll. 33–35.

While in the latter example the only characteristic concerning *umṣatu* is the colour which it may acquire, in the former – describing an illness (*nīpištu*) associated with abscesses or boils (*ummedu*)<sup>51</sup> – it is used to indicate something that “seizes its exit”, probably the anus.

## Therapeutic texts

The word *umṣatu* can also be found in therapeutic texts,<sup>52</sup> which offer different kinds of recipes (that is, directions for the preparation of drugs and the application of medications) useful for curing the patient, especially those related to diseases occurring close to the anus.<sup>53</sup> It may appear alone or together with other terms, such as *uršu*,<sup>54</sup> a lesion projecting from the anus area.

Some examples follow:

- (18) DIŠ NA KA DÚR-šú MÚ.MÚ-ḥu ú-na-paq qer-bé-nu GIG *um-ša-tu*<sub>4</sub> ILLU  
[...] ILLU LI.DUR NUMUN <sup>ú</sup>*ak-tam* ŠE<sub>10</sub> UR.GI<sub>7</sub> SUḤUŠ <sup>giš</sup>NAM.TAL NÍTA <sup>ú</sup>KUR.  
RA<sup>sar</sup>  
(...)

‘If as for a man the opening of his anus is bloated and blocked, (his) inside is ill: *umṣatu*. Resin of [...], resin of *abukkatu*, seed of *aktam*, dog excrement, root of male *pillû*, *nīnû*, (...).’ (AMT 47,1 + duplicates)<sup>55</sup>

- (19) DIŠ NA *ur-šu dan-nu* KÁ MUD-šú DAB-*ma* KÁ MUD ÚŠ-ḥi NUMUN <sup>giš</sup>G[  
ZÚ.LUM.MA] šá UGU NINDU [...] NAGA.SI <sup>ú</sup>KUR.RA DIŠ-*niš* SÚD *ina* Ì.UDU  
ÉLLAG UDU.NÍTA ḤE.ḤE *a*[*la-nu DÛ-uš*] *ana* DÚR-šú G[AR-*an*] *a-na ur-še* GAZ  
*um-ša-a-ti qut-tu-pi* KÁ MUD-šú *mu-uš-[ši ...]* ÚKUŠ.ḤAB GE<sub>6</sub> [...] <sup>ú</sup>KUR.RA *saḥ-*  
*lu-u* Ú BABBAR U<sub>5</sub>.GAR.IB<sup>mušen</sup> MUN.KÛ.PAD DIŠ-*niš* GAZ S[IM ...] *ana* DÚR-šú  
GAR-*an*  
DIŠ NA DÚR-šú *ḥa-niq-ma* DÚR-šú *ur-še u um-ša-a-ti* DIRI *ana* TI-šú <sup>ú</sup>KUR.[R]A  
<sup>šim</sup>LI <sup>šim</sup>GIG <sup>ú</sup>NA[M.T]I.LA *mal-m[a-liš* DIŠ-*niš* SÚD] *ina* Ì.UDU *u* ILLU <sup>šim</sup>BULUḤ  
ḤE.ḤE *u* DÛ-uš *ana* DÚR-šú GAR-*an-ma* TI

51 CAD U/W 119, AHw 1416.

52 Although we are not well informed about their composition, we know that there are some collections of medical prescriptions devoted to specific parts of the human body and to different symptoms, such as those dealing with the head, and the *kis libbi* disease. In general, see Heeßel 2010b, 31–35.

53 For an in-depth study of the question, see especially Geller 2005; 2010.

54 CAD U/W 252. See, for instance, Scurlock/Andersen 2005, 230–231.

55 Geller 2005, 155, no. 24 iv 1’–3’.

‘If as for a man *uršu* seizes the opening of his anus, so that the opening to his anus is blocked: you pound together *kūru*-seed, which is over the oven, [...], horned alkali (salicornia?), (and) *nīnū*, mix (them) in fat from the kidney of a male sheep, make a suppository, and insert it into his anus. In order to break the *uršu*, (and) to cut off the *umṣatu*, (and) to spread out the opening of his anus, you pound and sieve together [...], black cucumber, [...], *nīnū*, *saḥlū*, ‘white’-plant, bat guano, (and) block-salt, [... (and)] insert it into his anus.

If as for a man his anus is constricted, and his anus is full of *uršus* and *umṣatus*, to cure him you pound together in equal measures *nīnū*, *burāšu*-juniper, *kanaktu*, ‘health’-plant, mix (them) with fat and *baluḥḥu*-resin, make (a suppository), (and) insert it into his anus. He will recover.’ (BAM I 95:10–15)<sup>56</sup>

- (20) DIŠ NA DŪR-šú *um-ša-ti* [DIRI] KĀ-šú ÚŠ-ḥi *ana um-ša-t[i] qut-tu-pi* [...]

‘If a man, his anus [is full of] *umṣatu*, (and) his opening is closed off, to remove the *umṣatu* [...].’ (STT 97 iii 19)<sup>57</sup>

- (21) *šum-ma ur-še* GAZ.MEŠ *šum-ma um-ša-a-tú uq-ṭa-ta-pa*  
GIG *up-ta-šaḥ* DŪR-šú *ur-tap-pa-áš mar-ḥa-šu an-nu-u*  
*ša* NAM.RI.BŪR.DA GIG DŪ.A.BI

‘If *uršus* have been broken, if *umṣatus* have been cut off, the illness will be relieved, his anus will be widened. This lotion is (good for curing) from oath, (and) all the diseases.’ (BAM II 168: 51–53)<sup>58</sup>

In the above cases *umṣatu* is described – in some lines together with *uršu* – as something protruding from and blocking the anus that must be cut off and removed in order to cure the patient.

As already mentioned, this lesion might also be observed on the penis, as in the following lines, unfortunately very fragmentary:

- (22) DIŠ *i-na* KA GIŠ-šú *um-ṣ[a-tu ...]*  
(...)  
DIŠ *ina* ŠÀ GIŠ-šú *um-ša-tum* [...]

‘If at the opening of his penis there is an *umṣatu* [...]

(...)

If in the middle of his penis there is an *umṣatu* [...].’ (AMT 22,1: 13; 19)<sup>59</sup>

<sup>56</sup> Geller 2005, 131, and 2010, 67, and Scurlock/Andersen 2005, 150, nn. 6.171 and 6.175.

<sup>57</sup> Scurlock/Andersen 2005, 149, no. 6.170.

<sup>58</sup> Adamson 1984, 15, no. 45.

<sup>59</sup> Adamson 1984, 15, no. 45.

*Umṣatu* might also occur in a man's nostrils, as in the following example from the series *Šumma amēlu muḥḥašu umma ukâl*,<sup>60</sup> in which it is accompanied by the word *ḥīlu*<sup>61</sup>:

(23) DIŠ NA *na-ḥi-ri-šú um-ša-at ḥi-li it-tab-li* NA<sub>4</sub> *gab-ú* <sup>šim</sup>ŠEŠ Ū BABBAR 1-niš [...] *ana* UGU MAR-[*ma ina-eš*]

'If as for a man his nostrils have an exuding *umṣatu*, [...] alum, myrrh, (and) white plant together, spread it over (the lesion), [and he will recover]' (SpTU I: 44, l. 34)<sup>62</sup>

So, although example no. 22 – to my knowledge, the only therapeutic text attesting the presence of *umṣatu* on the penis – is too fragmentary to furnish a description of this mark/lesion, example no. 23 informs us that it is “exuding” something.

The following chart may help us to perform a more detailed analysis; it contains a list of the body parts on which *umṣatu* might be observed, and – when specified – its possible colour, according to all the medical texts to my knowledge in which this word is attested:

Tab. 2

Text	Lines	Body's area	Man	Woman	Child	Colour
SA.GIG	33	17 Anus?	x			
	36	33–35 The tip of the breast		x		white; red/brown; black
AMT	17,5	1; 10 ?	x			
AMT	18,3	1 ?	x			
AMT	22,1	13; 19 Penis	x			
AMT	40,4 + 57,5	27'; 29' Anus	x			
AMT	40,5	iii 5' Anus	x			
AMT	47,1	iv 1' Anus	x			
BAM I	95	12; 14 Anus	x			
BAM I	96	iii 3' Anus	x			
BAM II	104	42; 64 Anus	x			
BAM II	168	51; 66 Anus	x			
BAM II	182	7'–8' Anus	x			

<sup>60</sup> The series, probably composed during the reign of Assurbanipal, deals with diseases affecting the head. For an in-depth analysis, see in particular Attia/Buisson 2003, Worthington 2005, 2006, and 2007, Heeßel 2009, 2010b, and 2010c. For a case study, see Salin 2016.

<sup>61</sup> CAD H 188. See also Scurlock/Andersen 2005, 150.

<sup>62</sup> Hunger 1976, 51, Tab. 44, l. 34, and Scurlock/Andersen 2005, 150, no. 6.172.

(Continued)

SpTU I	44	34	Nostrils	x
STT 97		iii 10;	Anus	x
		15; 19		

From the chart and the examples given above it emerges that the majority of the medical texts record *umṣatu* on (or close to) the anus. It is described as something projecting from it, and that has to be removed. It might also occur on the penis, in the nostrils, or on the tip of a woman's breast, assuming different colours, such as white, black, and red/brown.

## Interpretations by modern scholars

As already mentioned, the interpretations of *umṣatu* given by scholars over time are various and divergent. Most commonly, it has been understood as “mole”<sup>63</sup> or simply “spot/mark”,<sup>64</sup> but also as “lesion”, and “abscess, boil”.<sup>65</sup>

The translations suggested in the first half of the last century by H. Holma, E. Ebeling and R. Labat<sup>66</sup> – “Brandmal” (brand), “Aussatz” (leprosy), and “Bläschen” (blister), respectively – are now considered very unlikely,<sup>67</sup> and other hypotheses have been proposed. For instance, a brief analysis of the term is offered by P.B. Adamson in the article “Anatomical and Pathological Terms in Akkadian”.<sup>68</sup> Considering all the types of text in which this term is attested, he theorized that in the cases where it appeared on (or around) the nipples of a pregnant woman it could be considered “a proper description of the small swellings of the areolar tissue of the breast which occur normally during pregnancy”, while its presence “on other parts of the body cannot however be considered normal tissue”.<sup>69</sup> Additionally, in his opinion, instances of one (or more) *umṣatu* on the penis could refer to a *pigmented naevus*, probably a congenital malformation (*hamartoma*) that “may undergo malignant change”.<sup>70</sup> In their study of

<sup>63</sup> See, for instance, Leichty 1970, 66.

<sup>64</sup> Böck 2000 (“Hautmal”), and Heeßel 2000, 359, (“Mal”), and 2007, 26 (“Hautmal”).

<sup>65</sup> Hunger 1976, 51, (“Geschwür”), and Geller 2010, 67, (“Geschwür”).

<sup>66</sup> Holma 1913, 6, Ebeling 1928–1932, 321, Labat 1957–1971, 232.

<sup>67</sup> See, in particular, Scurlock/Andersen 2005, 721–722, no. 108.

<sup>68</sup> Adamson 1984.

<sup>69</sup> He also points out that “however, it may very occasionally be confused with Paget’s disease of the nipple” (Adamson 1984, 8).

<sup>70</sup> Adamson 1984, 8–9. His suggestion is based on the lexical texts, such as that edited by Leichty (1970, 216, comm. 128): *pi-in-du-u = um-ša-tú sa-an-du* (“*pindû* = a flecked *umṣatu*”). For a discussion

Assyro-Babylonian medicine J. Scurlock and B.R. Andersen give a concise analysis of *umṣatu*,<sup>71</sup> suggesting that in cases where it is present in the anal region, it is used to indicate haemorrhoids<sup>72</sup>; they also noted that when it occurs in the nostrils it could describe nasal turbinates. In their opinion, “in allergies due to inhaled substances such as pollen, the turbinates may become enlarged and covered with mucus. It seems likely that the *āšīpu* saw a resemblance between the appearance of haemorrhoids and enlarged nasal turbinates”.<sup>73</sup> Regarding its presence around the nipples of pregnant women, they agree with P.B. Adamson in saying that it may indicate swellings of the areolar tissue.<sup>74</sup>

## Conclusion

The analysis offered above is divided into two main parts: in the first different types of omens were examined, and in the second medical texts considered.

According to both kinds of text *umṣatu* can be observed on different parts of the human body. While on men it is attested on almost every area of the body – especially on the head – on women it is recorded on the ears, shoulder blade, hips, nipples, hypogastric region, and navel. Furthermore, in one case it is described as covering the whole body of a newborn child. This bias is not surprising, for it is well known that Assyro-Babylonians mostly registered observations of the male body, turning their attention to the females in just a few cases, e.g. during pregnancy.

It has also been noted that, in only a few cases, *umṣatu* might take on different colours; for instance, respectively on women’s ears and navel, it might be yellow/green or red/brown, and white, black, or red/brown.

Moreover, it has been stressed that in omens it is difficult to find a description of its characteristics, while in medical texts there is some indication of these. As already noted, divinatory and medical texts have different purposes. The former aim, in general, to observe, register and decipher the different kinds of phenomena, i.e. the signs left by deities, in order to understand what to do in particular circumstances, or to determine the will of the gods, while the latter offer different kinds of information – diagnoses, prognoses, instructions for the preparation of drugs and the application of medications – that serve for treatment of the patient.

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of the term *pindû*, see Adamson 1959, 2–3; Labat 1957–1971, RLA 3.233; Scurlock/Andersen 2005, 231.  
71 Scurlock/Andersen 2005, 148–150, 152, 207, 230, and 241.

72 Haemorrhoids could also be indicated by the words *uršu* and *baškiltu* (see Scurlock/Andersen 2005, 149–151). Even Geller translates it as “haemorrhoids” in his study devoted to renal and rectal diseases (Geller 2005).

73 Scurlock/Andersen 2005, 207.

74 Scurlock/Andersen 2005, 230.

Considering 1) in general, the problem of retrospective diagnosis, as noted by N.P. Heeßel,<sup>75</sup> and 2) in particular, the information we have about the word *umṣatu* – in truth, not a lot – it is very difficult to find a reliable definition of it.

P.B. Adamson's hypothesis of *pigmented naevus*, for instance, seems unlikely. As already pointed out by J. Scurlock and B.R. Andersen, "this interpretation will not, however, account for the uses of this term in many of the references to this lesion in medical texts".<sup>76</sup> Moreover, although in medical texts *umṣatu* could probably be understood as the swellings of the areolar tissue of a pregnant woman's breast – in agreement with P.B. Adamson's hypothesis – in omen texts it is not possible to verify this identification. Furthermore, the suggestion by J. Scurlock and B.R. Andersen that it could indicate haemorrhoids seems not unreasonable; nevertheless, they assign the same meaning to other two words: *uršu* and *baškiltu*. Even though they specify that "in contrast to *umṣatu*, these terms seem to be used exclusively to describe haemorrhoids", while *umṣatu* "is also used to describe other similar lesions",<sup>77</sup> it seems to me unlikely that three words – in some cases found together in the same text – were used to indicate the same thing. They more probably designate some lesions, swellings (or *similia*), the descriptions of which appear to be the same to us, but that from an Assyro-Babylonian point of view were thought different.

Considering all these aspects, the above reflections on the possible meanings of the word *umṣatu* would benefit from integration with further analyses, in order to extend the scope of this work. The present article may be considered a first step in a more complex study involving the analysis of other words related to problems concerning the skin (at times connected with *umṣatu* itself).<sup>78</sup> Basing such a study on a similar approach – that is, examining all the texts in which these terms occur, and recording all the characteristics described in these texts – will hopefully lead to a more complete view of the matter. This wider analysis will aim to clarify not only the meanings assigned to specific words, but also the way in which these words were classified, opening the way to a deeper understanding of Assyro-Babylonian thought.

## Bibliography

- Adamson, P. B. 1984. "Anatomical and Pathological Terms in Akkadian: Part IV". In: *Journal of the Royal Asiatic Society* 116.1, 3–18.
- Annus, A. (ed.) 2010. *Divination and Interpretation of Signs in the Ancient World*. Chicago.
- Attia, A. & G. Buisson. 2003. "Si le crâne d'un homme contient de la chaleur, deuxième tablette". In: *Le Journal des Médecines Cunéiformes* 1, 1–24.

<sup>75</sup> Heeßel 2004, 6. Furthermore, see, among others, also Robson 2008, 461, and Fales 2015, 8–12.

<sup>76</sup> Scurlock/Andersen 2005, 721–722, n. 108.

<sup>77</sup> Scurlock/Andersen 2005, 230–231.

<sup>78</sup> It is worth noting that in some cases it is used to describe other skin lesions, such as *ḫalū* and *pindū*. See, for instance, Scurlock/Andersen 2005, 231, and Böck 2010, 84–85.

- Attinger, P. 2008. "La médecine mésopotamienne". In: *Le Journal des Médecines Cunéiformes* 11–12, 1–96.
- Bahrani, Z. 2008. *Rituals of War. The Body and Violence in Mesopotamia*. New York.
- Böck, B. 1999. "Homo mesopotamicus". In: B. Böck, E. Cancik-Kirschbaum, & T. Richter (eds.), *Munuscula Mesopotamica. Festschrift für Johannes Renger*. Münster, 53–68.
- Böck, B. 2000. *Die Babylonisch-Assyrische Morphoskopie*. Wien.
- Böck, B. 2010. "Physiognomy in Ancient Mesopotamia and Beyond: from Practice to Handbook". In: A. Annus (ed.), *Divination and Interpretation of Signs in the Ancient World*. Chicago, 199–224.
- Böck, B. 2014. *The Healing Goddess Gula. Towards an Understanding of Ancient Babylonian Medicine*. Leiden.
- Bottéro, J. 1974. "Symptômes, signes, écritures en Mésopotamie ancienne". In: J. P. Vernant *et al.* (eds.), *Divination et Rationalité*. Paris, 70–195.
- Campbell, T., R. 1923. *Assyrian Medical Texts from the originals in the British Museum*. London.
- Cardona, G. R. 2006. *Introduzione all'etnolinguistica*. Torino.
- De Zorzi, N. 2014. *La serie teratomantica Summa Izbu. Testo, tradizione, orizzonti culturali*, 2 vols. Padova.
- Ebeling, E. 1928–1932. "Ausatz". In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 1, 321.
- Fales, F.M. 2015. "Anatomy and Surgery in Ancient Mesopotamia: A Bird's-eye View". In: H. Perdicoyanni-Paléologou (eds.), *Anatomy and Surgery from Antiquity to the Renaissance*. Amsterdam, 3–71.
- Finkel, I. L. 1988. "Adad-apla-iddina, Esagil-kīn-apli, and the series SA.GIG". In: E. Leichty & M. de Jong Ellis (eds.), *A Scientific Humanist: Studies in Memory of Abraham Sacks*. Philadelphia, 143–159.
- Freedman, S. M. 1998. *If a City is Set on a Height*, 2 vols. Philadelphia.
- Geller, M. J. 2005. *Renal and Rectal Disease Texts*. Berlin.
- Geller, M. J. 2010. "Skin Disease and the Doctor". In: *Le Journal des Médecines Cunéiformes* 15, 40–56.
- Heeßel, N. P. 2000. *Babylonisch-assyrische Diagnostik*. Münster.
- Heeßel, N. P. 2004. "Diagnosis, Divination and Disease: Towards an Understanding of the rationale behind the Babylonian Diagnostic Handbook". In: H. F. J. Horstmanshoof & M. Stol (eds.), *Magic and Rationality in Ancient Near Eastern and Graeco-Roman Medicine*. Leiden, 97–116.
- Heeßel, N. P. 2007. *Divinatorische Texte I. Terrestrische, teratologische, physiognomische und oneiromantische Omina*. Wiesbaden.
- Heeßel, N. P. 2009. "The Babylonian Physician Rabâ-ša-Marduk. Another look at Physicians and Exorcists in the Ancient Near East". In: A. Attia & G. Buisson (eds.), *Advances in Mesopotamian Medicine from Hammurabi to Hippocrates*. Leiden, 13–28.
- Heeßel, N. P. 2010a. "Neues von Esagil-kin-apli. Die ältere Version der physiognomischen Omen-serie *Alamdimmû*". In: S. Maul & N. P. Heeßel (eds.), *Assur-Forschungen. Keilschrifttexte aus Assur literarischen Inhalts. Suppl.* Wiesbaden, 139–187.
- Heeßel, N.P. 2010b. "Einleitung zur Struktur und Entwicklung des Korpus der therapeutischen Texte". In: B. Janowski & D. Schwemer (eds.), *Texte zur Heilkunde*, TUAT NF 5. München, 31–35.
- Heeßel, N.P. 2010c. "Erkrankungen des Kopfes". In: B. Janowski & D. Schwemer (eds.), *Texte zur Heilkunde*, TUAT NF 5. München, 45–52.
- Holma, H. 1913. *Kleine Beiträge zum assyrischen Lexikon*. Helsinki.
- Hunger, H. 1976. *Spätbabylonische Texte aus Uruk, Teil I*. Berlin.
- Koch, U. S. 2005. *Secrets of Extispicy. The Chapter Multābiltu of the Babylonian Extispicy Series and Niširti bārūti Texts mainly from Aššurbanipal's Library*. Münster.
- Koch, U. S. 2015. *Mesopotamian Divination Texts: Conversing with the Gods. Sources from the First Millennium BCE*. Münster.
- Köcher, F. 1963–1980. *Die Babylonisch-assyrische Medizin in Texten und Untersuchungen*, vols. 1–6. Berlin.

- Köcher, F., & A. L. Oppenheim. 1957–1958. “The Old-Babylonian Omen Text VAT 7525”. In: *Archiv für Orientforschung* 18, 62–77.
- Labat, R. 1951. *Traité akkadienne de diagnostics et pronostics médicaux*. Paris.
- Labat, R. 1957–1971. “Geschwulst, Geschwür, Hautkrankheiten”. In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 3, 231–233.
- Lambert, W. G. 1957. “Ancestors, Authors, and Canonicity”. In: *Journal of Cuneiform Studies* 11, 1–14.
- Landsberger, B. 1967. “Über Farben im Sumerisch-Akkadischen”. In: *Journal of Cuneiform Studies* 21, 139–173.
- Lenzi, A. 2008. *Secrecy and the Gods. Secret Knowledge in Ancient Mesopotamia and Biblical Israel*. Helsinki.
- Leichty, E. 1970. *The Omen Series Šumma Izbu*. New York.
- Maul, S. 2003. “Omina und Orakel”. In: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 10, 45–88.
- Noegel, S.B. 2010. “‘Sign, Sign, Everywhere a Sign’: Script, Power, and Interpretation in the Ancient Near East”. In: A. Annus (ed.), *Divination and Interpretation of Signs in the Ancient World*. Chicago, 143–162.
- Oppenheim, L. 1974. “A Babylonian Diviners Manual”. In: *Journal of Near Eastern Studies* 33, 197–220.
- Rochberg, F. 1999. “Empiricism in Babylonian Omen Texts and the Classification of Mesopotamian Divination as Science”. In: *Journal of the American Oriental Society* 119, 559–569.
- Rutz, M. T. 2011. “Threads for Esagil-kin-apli. The Medical Diagnostic-Prognostic Series in Middle Babylonian Nippur”. In: *Zeitschrift für Assyriologie* 101, 294–308.
- Salin, S. 2016. “Transmission and Interpretation of Therapeutic Texts. *Šumma amēlu muḥḥašu umma ukāl*: A Case Study”. In: *Distant Worlds Journal* 1, 117–132.
- Scurlock, J., & B. R. Andersen, B.R. 2005. *Diagnoses in Assyrian and Babylonian Medicine*. Urbana.
- Scurlock, J. 2014. *Sourcebook for Ancient Mesopotamian Medicine*. Atlanta.
- Stol, M. 1991–1992. “Diagnosis and Therapy in Babylonian Medicine”. In: *Jaarbericht van het Vooraziatisch Egyptisch Genootschap Ex Oriente Lux* 32, 42–65.
- Stol, M. 1993. *Epilepsy in Babylonia*. Groningen.
- Verderame, L. 2004. “I colori nell’astrologia mesopotamica”. In: H. Waetzoldt (ed.), *Von Sumer nach Ebla und zurück. Festschrift Giovanni Pettinato zum 27 September 1999 gewidmet von Freunden, Kollegen und Schülern*. Heidelberg, 327–332.
- Worthington, M. 2005. “Edition of UGU 1 (=BAM 480 etc.)”. In: *Le Journal des Médecines Cunéiformes* 5, 6–43.
- Worthington, M. 2006. “Edition of BAM 3”. In: *Le Journal des Médecines Cunéiformes* 7, 18–48.
- Worthington, M. 2007. “Addenda and Corrigenda to ‘Edition of UGU 1 (=BAM 480 etc.)’ and ‘Edition of BAM 3’”. In: *Le Journal des Médecines Cunéiformes* 5, 43–46.

## Abbreviations

- AHW *Akkadisches Handwörterbuch*, Wiesbaden.
- CAD *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, Chicago.