

Eye diseases in the Ebers Papyrus

Part 4: Eb 418–431

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1 Introduction

Detailed information on the Ebers Papyrus can be found in the metadata of the online translation by L. Popko.¹ The section of the papyrus called “Eye Book” includes Eb 336–431. A few additional medical prescriptions for eye diseases appear sporadically in other sections of the Ebers Papyrus (these do not name any particular eye diseases not also included in the Eye Book).

This fourth and final part of my series about eye diseases in the Ebers Papyrus² deals with Eb 418–431. The respective disease name was translated³ and subjected to a modern ophthalmological interpretation. Frequent diagnoses were preferred over rare ones, and the environmental and living conditions in ancient Egypt were taken into account. Repetitions were inevitable because certain (presumably common) eye diseases appear twice or several times in the text (see the statistics table in section 3). The so-called “k.t-prescriptions”⁴ have the simple title “Something else” (k.t) or “Another eye make-up” (ky sdm), but do not specify which eye disease they are intended to treat. There is reason to believe that these are alternative treatments to the aforementioned disease.⁵ All statements must be viewed as hypotheses.

¹ L. Popko (online), metadata, <<https://sae.saw-leipzig.de/de/documents/papyrus-ebers>>, with literature overview (last accessed 06.02.2024).

² Previous parts: E. Trautmüller, *Eye diseases in the Ebers Papyrus*, Parts 1–3 (Vienna 2023), <<https://www.egyptological-hypotheses.org>>.

³ Dictionaries used:

- A. Erman and H. Grapow, *Wörterbuch der ägyptischen Sprache*, Vols I–VII, (Berlin, 1897–1961; unchanged reprint, Berlin, 1971), subsequently referred to as “Wb” for short.
- R. Hannig, *Die Sprache der Pharaonen: Großes Handwörterbuch Ägyptisch – Deutsch, Marburger Edition* (KAW 64; 4th revised edn, Mainz, 2006), subsequently referred to as “Hannig” for short.

Other translations used on a case-by-case basis:

- B. Ebbell, *Alt-ägyptische Bezeichnungen für Krankheiten und Symptome* (Oslo, 1938), subsequently referred to as “Ebbell” for short.
- B. Ebbell, “Die ägyptischen Krankheitsnamen”, *ZÄS* 59 (1924), 55–59, subsequently referred to as “Ebbell, *ZÄS*” for short.
- B. Lalanne and G. Métra, *Le texte médical du Papyrus Ebers: Transcription hiéroglyphique, translittération, traduction, glossaire et index* (Langues et cultures anciennes 28; Brussels, 2017), subsequently referred to as “Lalanne and Métra” for short.
- L. Popko, “Papyrus Ebers: Übersetzung und Kommentar”, in *Science in Ancient Egypt* (Leipzig, online) <<https://sae.saw-leipzig.de/de/documents/papyrus-ebers>> (last accessed 06.02.2024), subsequently referred to as “Popko (online)” for short.
- W. Westendorf, “Handbuch der Altägyptischen Medizin”, Vols 1 and 2, in H. Altenmüller et al. (eds), *Handbuch der Orientalistik, Erste Abteilung: Der Nahe und Mittlere Osten* (Boston, Cologne, and Leiden, 1999), subsequently referred to as “Westendorf” for short.

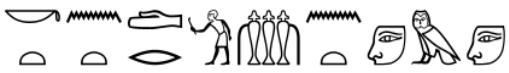
⁴ Cf. Westendorf, 55, 89, 91, etc.

⁵ An exception is Eb 362, which based on the administration instruction is clearly an alternative treatment to the following prescription, Eb 363.

2 Eye diseases (Eb 418–431)


As in the previous parts of this work, the text occasionally refers to images in the online “Atlas of Ophthalmology” (<https://www.atlasophthalmology.net>).⁶

Eb 418 (63,2–3)

Text:	
Transcription:	k.t n(j).t dr hnt m fnd
Translation:	Something else to remove secretion from the nose

This remedy is specifically directed against excessive secretion from the nose (rhinitis).⁷ The prescription appears the Eye Book although there is a separate section in the Ebers Papyrus for diseases of the nose (Eb 761–763). After all, a runny nose can be accompanied by red, glassy eyes. Allergic rhinitis involving the eyes, e.g. a reaction to flowering grasses, is also possible.

Eb 419 (63,4–6)


Text:	
Transcription:	ky sdm.w jr(.w) n(j) wr mʿ.w Hwvy
Translation:	Other eye make-up prepared for Chuy, the Great of the Seers

⁶ Such references consist of the abbreviation “AoO” and an image number. To access an image on the website <<https://www.atlasophthalmology.net>>, please select the search function in the green menu bar, enter the image number in the search field that opens (“search phrase”) and click the “Search” button. click.

⁷ Translations of hnt m fnd by other authors: runny nose/catarrh in the nose (Westendorf, 622; Popko [online], Eb 418); khent disease (“[mal-]khent qui est dans le nez”; Lalanne and Métra, 131). Other expressions for a cold in the Ebers Papyrus: Eb 192 (37,18): “Secretion comes from his ‘front’, whereby his eyes have become red and his face is wet” (hnt.y r hʿ.t=f jw jr.tj=fj šsm.tj jw hnt=f tʿhb=f). Eb 762 (90,14–15): njʿ m fnd (sneeze? from the nose; Hannig, 413 [14847]; Wb II, 201.12). Eb 763 (90,16): šn.t rš (suffering from a cold/conjuring a cold; Hannig, 510 [18350], 892 [33077], 893 [33085]; Wb II, 453.19, Wb IV, 496.8–9).


Here for the first time in the Eye Book, an individual preparation for a specific patient is described.⁸ Eye make-up is exceptionally in plural (sdm.w), so one would expect at least two separate mixtures. Perhaps the mixture of black and green eyeshadow (msdm.t, w3d.w) needs to be considered separately from the subsequent mixture of minerals, “drug from far away”⁹ and fermented honey. The medical purpose remains unclear.

Eb 420 (63,6–7)

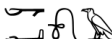
Text:	
Transcription:	k.t n(j).t dr šp.t m jr.tj
Translation:	Something else to eliminate blindness in both eyes

After Eb 356 (57,17–21) and Eb 357 (57,21–58,2), this is the third prescription against blindness.¹⁰ It is not clear what distinguishes the šp.t blindness from those other eye conditions that required an “opening of the eyesight” (wb3 m3¹¹). Possibly šp.t was a general term for blindness, whereas the expression “opening of the eyesight” was only used for those forms of blindness that were caused by adhesions or clouding visible from the outside.

Eb 421 (63,7–8)

Text:	
Transcription:	k.t n(j).t dr ḥsf.w n(j) ḥc.w m jr.tj
Translation:	Something else to remove the “tight closures” of the tissue in both eyes

⁸ To my knowledge, the name Chuy for a great seer is not documented outside of the Ebers Papyrus. However, the name by itself was relatively common (S. D. Schweitzer et al., <<https://simondschweitzer.github.io/aed/400017.html>> last accessed 06.02.2024).

⁹ This translation is based on my personal reading of  as ḥt-c w3(j) (see the commentary on prescription Eb 388 in Part 3 of this work [Traunmüller, *Eye diseases, Part 3*, 3–4]). Other authors read ḥt-c w3 and translated it as “rotten/petrified wood” (Westendorf, 622; Popko [online], Eb 419; Lalanne and Métra, 131).


¹⁰ See Traunmüller, *Eye diseases, Part 1*, 16–17. The translation of šp.t as “blindness” is undisputed (Lalanne and Métra, 131; Westendorf, 623; Popko [online], Eb 420).

¹¹ It is the medical indication of the prescriptions Eb 342, 377, 396–399, and 414.

The word ḥꜥ.w (“body parts, flesh, tissue”) should actually be determined with the hieroglyph F51 (small piece of meat);¹² in the Ebers Papyrus it is clearly F21 (cattle ear). For the traditional interpretation of this eye disease, the verb ḥsf was translated as “to turn around, to invert”. Therefore it seemed clear that ḥsf.w nj ḥꜥ.w m jr.tj (“inversion of the flesh in both eyes”) was a vivid description of bilateral ectropion (*Ectropium*).¹³ Ectropion is a drooping lower eyelid that, in severe cases, folds outwards and can occur on both sides. It occurs with age-related atony of the eye ring muscle (*Ectropium senile*; AoO 2629), with paralysis of the facial nerve (*Ectropium paralyticum*, but this very rarely occurs on both sides) or with cicatricial distortion of the eyelid (for example after a burn; *Ectropium cicatriceum*; AoO 2628).

However, this translation of the verb ḥsf would require the hieroglyph D54 (walking legs) as the determinative.¹⁴ Instead, ḥsf here is determined with D40 (arm with baton) and therefore rather belongs in the spectrum of meanings of “to defend, to deter, to oppose”. Based on this idea of defensiveness, the verb ḥsf can also be found used as “to close [a door] firmly”,¹⁵ and in the form of the participle ḥsf.w („those which defend“, determined with three door leaves [O31])¹⁶ as a synonym for the locked Gate of Heaven. I therefore disagree with the interpretation of ḥsf.w nj ḥꜥ.w as ectropion and instead suggest “firm closure of the tissue [of the eyelids]” as the proper translation. The use of the verb ḥsf is understandable because the tight closure of the eyelids normally serves as defense, and the eyelids can rightly be viewed as the eye's defensive “doors”. In my opinion, the eye condition in question is adhesions of the eyelids to each other or to the eyeball, e.g. in the final stages of untreated trachoma or after an injury or burn (AoO 9408).

Eb 422 (63,8–11)

Text:	
Transcription:	k.t phr.t n(j).t jr.tj dd.t.n ʿm n(j) Kpnj

¹² Hannig, 545 (19722, 19731); Wb III, 37.8, 38.26.

¹³ Translations by other authors: Turning/inversion of the flesh (Ebbell, 39; Westendorf, 623); ectropion (Ebbell, 27, 39); ḥsf-of-the-flesh suffering (Popko, Eb 421); a displaced part of the flesh (Lalanne and Métra, 131).

¹⁴ Hannig, 669 (24405); Wb III, 337.11–13.

¹⁵ Hannig, 669 (47403).

¹⁶ Hannig, 669 [24409]; Wb III, 337.17).

Eb 424 (63,12-13)

An inward curvature of eyelashes most often occurs on the lower eyelid.²⁵ Either the entire edge of the lower eyelid bends towards the eyeball (entropion; AoO 85), or one or more eyelashes bend towards the eyeball while the eyelid is in a normal position (*Trichiasis*; AoO 2633).²⁶ Entropion has similar causes to ectropion (see page 5). The inwardly bent eyelashes cause a permanent foreign body sensation in the eye. There tips can chafe the cornea and cause irreversible damage in the long term. If the problem occurs in the upper eyelid, it is mostly due to cicatricial distortions (*Entropium cicatriceum*; AoO 4909).

Eb 425 (63,14-18) and Eb 429 (64,1-3)

²³ Translations by other authors: globule (Popko [online], Eb 423; Westendorf, 623); *hordeolum* (Westendorf, 623); *(formation-)peseset* (Lalanne and Métra, 131; these authors apparently considered “pzs.t” to be correct).

²⁴ It mainly occurs when working with wood or metal without safety goggles. Such foreign bodies can hit the surface of the cornea with high kinetic energy and can then only be removed with special instruments. If a foreign body remains on the cornea for a longer time, a defensive reaction develops in the corneal tissue around it.

²⁵ w^cf: Hannig, 198 (7061, 7062); Wb I, 285.3; šnj: Hannig, 894 (33132); Wb IV, 500.8.


²⁶ Translations by other authors: the eyelash hairs are curved (Hannig, 198 [7062]); Inflection/curvature of a hair (Popko [online], Eb 424; Westendorf, 623); *trichiasis* (Westendorf, 623); inversion of an eyelash (Lalanne and Métra, 131); trapped eyelash hair (Wb I, 285.3).

Transcription:	k.t n(j).t tm rd(.w) r(w)d šnj m jr.t m-ht fd.t(w)=f
Translation:	Something else to prevent an eyelash from re-growing on the [edge of the] eye after it has been plucked out

(It literally says: “Something else for not letting an eyelash grow [..]”). If an eyelash that is bent towards the eyeball (*trichiasis*, see above) is plucked out, it regrows in the same deformity. The prescribed remedy should be applied to the spot of the plucked eyelash to prevent regrowth.

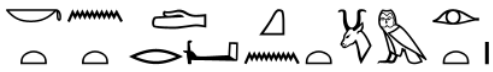
Those three prescriptions that are inserted in the order between Eb 425 and Eb 429 (Eb 426 [63,18–19], Eb 427 [63,19–20], and Eb 428 [63,21–64,1]) are simply titled “Something else”. They are also intended to prevent unwanted eyelash re-growth, because these remedies should also be applied to the area of a previously plucked eyelash. Thus, in total there are five prescriptions with different formulas to combat this problem.

Eb 430 (64,3–4)

Text:	
Transcription:	k.t phr.t n(j).t dr pds.t m jr.t
Translation:	Another remedy to remove a globule in the eye

Like Eb 423 (page 6), this medical prescription describes a remedy for a *hordeolum*, a *chalazion*, a small spherical eyelid tumor, or a round foreign body in the eye. Only one eye is affected, but both eyes are to be treated.

Eb 431 (64,4–5)

Text:	
Transcription:	k.t n(j).t dr qn.t m jr.t
Translation:	Something else to remove “fat” in the eye

As already discussed in detail in Eb 354 (57,14–57,15),²⁷ qn.t ("the fatty one" [neuter]) is most likely a description of a *pinguecula*. It is a variably sized, sharply defined thickening of the bulbar conjunctiva at the edge of the cornea at 3 or 9 o'clock. If it extends in a wedge shape from the corner of the eye to over the edge of the cornea, it is called *pterygium* (AoO 477, AoO 7754).²⁸ Such thickenings of the conjunctiva are visually reminiscent of an accumulation of fat due to their yellowish-white color.²⁹

The qn.t disease should not be mixed up with qnj.t.³⁰

3 Additional remarks and statistics

The ancient Egyptian doctors were senior officials who received remuneration from the royal court in the form of food, precious metal (as a reward) and a grave befitting their status.³¹ According to the Greek historian Herodotus (Late Period), they were specialists for different parts of the body.³² The largely maintained structure of the entire Ebers Papyrus according to body regions seems to confirm this also for the medical profession of the Middle and New Kingdoms. In any case, it is undisputed that there were specialized ophthalmologists (zwnw jr.tj). There was even a hierarchy of royal ophthalmologists, i.e. an "ophthalmologist of the palace" (zwnw jr.tj pr-ꜥ), a "senior ophthalmologist of the palace" (wr zwnw jr.tj pr-ꜥ), and a "head of the palace's ophthalmologists" (hrp zwnw jr.tj nj pr-ꜥ). There were also doctors who were assigned to specific temples. The "houses of life" (pr-ꜥnh) attached to the temples were, among other things, probably the places for the medical treatment of outpatients, medical education and training, and the archiving of medical writings. Patients too ill to be taken to the doctor were visited in their homes.³³ The diagnoses were made through examinations involving all five senses. The distinction

²⁷ Traunmüller, *Eye diseases, Part 1*, 14–15.

²⁸ Translations by other authors: corneal ulcer (Ebbell, 56); fat/something fatty in the eye (Lalanne and Métra, 119, 133; Popko [online], Eb 354, Eb 431; Westendorf, 612, 624); *pinguecula* (falsely written "pinguicula", Westendorf, 612, 624).

²⁹ The name *pinguecula* is a contraction of the Latin words *pinguis* (fat) and *macula* (spot).

³⁰ The qnj.t disease occurs in Eb 416 [62,22–63,1]. B. Ebbell and Lalanne and Métra considered qn.t and qnj.t to be one and the same disease. Ebbell suggested that it is a corneal ulcer (Lalanne and Métra, 129; Ebbell, 56). All other authors described qnj.t as an eye injury or left the word untranslated. See also Part 3 of this work (Traunmüller, *Eye diseases, Part 3*, 15–16).

³¹ Westendorf, 478.

³² Herodotus, Book II, *The Land of Egypt and its History*, 84.

³³ Westendorf, 473–474, 476–477.

between pharmaceutical medicine, surgery and dentistry was not as strict as it is today.³⁴ Applying bandages apparently required specialist knowledge and there may have been specially trained staff for this (jrj nj wt).³⁵

As already mentioned, most medical prescriptions for eye diseases in the Ebers Papyrus are found in a section entitled “Compendium for the eyes” (dmd.t n(j).t jr.tj) which is now called the “Eye Book”. With the exception of the alternative prescriptions (“k.t-prescriptions”),³⁶ the prescriptions are not arranged according to medical indications, i.e. the same indications can be found in different places in this compendium.

The most frequent medical indications are “opening/strengthening/treating vision” (wb³ m³³/s.rwḏ m³³/srwḏ m³³, 15%), “decay” (ḏt/ḏy.t, 13%) “the whitened ones” (s.ḥḏ.w, corneal scars, 8%), “blood in the eyes” (znf m jr.tj, paraphrase for severe inflammatory redness of the conjunctivas, 5%), and preventing the re-growth of a plucked eyelash (5%).³⁷ For some descriptions of eye diseases, I have fully followed the traditional interpretation; for others I have introduced additional options, or expressed an opinion that completely deviates from the opinion of previous authors. Several disease descriptions, e.g. whḏ.w (papules), s.ḥḏ.w (corneal scars), nh³.(w)t (“bumps”, probably another word for papules), and

ḥsf.w nj ḥ^c.w (adhesions of the eyelids), as well as cases of blindness (šp.t, wb³ m³³), can be at least partially explained as symptoms or sequelae of trachoma. This underlines the great suffering that this eye infection must have caused in ancient Egypt. Trachoma still occurs frequently in the rural population of Egypt and other countries and is the most common infectious cause of blindness worldwide.³⁸

At least one of the prescriptions in the Eye Book (Eb 419 [63,4–6]) was made individually for a very distinguished patient. His high rank as the “Great of the Seers”³⁹ was certainly the reason why he could enjoy “personalized medicine”. However, the ingredients of the

³⁴ Westendorf, 480, 482–483.

³⁵ Westendorf, 486.

³⁶ Those with the simple title “Something else” (k.t) or “Another eye make-up” (ky sdm).

³⁷ My disease interpretations.

³⁸ Sadly, it still happens today that trachoma remains untreated although local treatment with an inexpensive antibiotic eye ointment is sufficient to cure the infection before irreversible sequelae occur.

³⁹ This title was held, among others, by the high priest of Heliopolis (Westendorf, 622; K. Sethe, “Die Sprüche für das Kennen der Seelen der heiligen Orte: Totb. Kap. 107–109, 111–116”, ZÄS 57 [1922], 12, 17).

remedy created for him are ordinary. On the other hand, the prescription Eb 422 (63,8–11) shared by a foreigner from Byblos lists some unusual ingredients.⁴⁰

In this work, the ingredients of the eye remedies were only mentioned in exceptional cases. They can be looked up in the previously published translations of the Ebers Papyrus.⁴¹ However, many drug substances have not yet been clarified. In any case, they were natural solids of mineral, plant or animal origin⁴² which were usually mixed with an aqueous or viscous carrier substance (pond water, plant sap, women's milk, oil/fat, honey, bone marrow). Very different prescriptions could be used for the same medical indication. The mixtures were to be placed in the eyes (m jr.tj/m-hnw jr.t, 20%), “towards the eyes” (r jr.tj, 15%), on the outside of the eyes (on the outer surface of the lids; 29%), or used to make up the eyes (14%). In addition, there were special methods of administration (20%), such as in the form of an eye bandage or poultice, pouring in by use of a vulture feather, or application to special areas of the eye. The incantations contained in three prescriptions in the Eye Book (Eb 356, 360, and 385) show that an eye treatment (like all medical treatments in ancient Egypt) was essentially a magical-religious ritual.⁴³

As a dosage information for solids, the unit “1” is usually shown as a vertical line after each ingredient. It is interpreted as a unit of volume. According to T. Pommerening, the symbol is an abbreviated form of a hieratic symbol for the unit 1 $\overline{\text{dj}}$ (it corresponded to ~300 cm³ in the New Kingdom).⁴⁴ However, in the case of eye prescriptions, this would result in a far too large total volume.⁴⁵ Therefore, at least for the Eye Book, Westendorf's interpretation of the symbol as 1 $\overline{\text{rj}}$ (Coptic “ro”, ~15 cm³) seems more plausible.⁴⁶ I suspect that a doctor was free to choose a unit of volume at his discretion, as long as he

⁴⁰ In the Eye Book, the following ingredients only appear in Eb 422: dates, green barley, alum, lead, and fresh behen oil (b³q w³d; Westendorf, 623; Popko translated b³q as “olive oil” [Popko online, Eb 422]).

⁴¹ See note 3. A list of officinal ingredients for all medical areas is given by H. von Deines and H. Grapow, *Wörterbuch der ägyptischen Drogennamen*, GMed VI (Berlin, 1959) with additions in Westendorf, 494–511.

⁴² Westendorf, 511–514.

⁴³ For example, the British Museum papyri (BM 10685, 10687, 10688, 19695 and 10698) and the Leiden I/348 Papyrus contain many spells against various diseases, scorpion stings or to hasten childbirth. Cf. Westendorf, 524–535.

⁴⁴ T. Pommerening, “Altägyptische Rezepturen metrologisch neu interpretiert”, *Berichte zur Wissenschaftsgeschichte* 26 (2003), 1–16.

⁴⁵ For example, Eb 339: 2400 cm³ (!) solids plus oil.

⁴⁶ Westendorf, 522. There is a set of New Kingdom bronze measuring cups covering volumes of approximately 6 to 0.1 cm³ in dyadic increments (ibid.). This roughly corresponds to 0.5 to 0.008 $\overline{\text{rj}}$ (1/2 to 1/128 $\overline{\text{rj}}$). However, it is unknown what was actually measured with these cups (Pommerening, *Berichte zur Wissenschaftsgeschichte* 26, 5).

followed the prescribed mixing ratio.⁴⁷ With a few exceptions, the Eye Book stipulated a mixing ratio of equal parts for solids.⁴⁸ In some prescriptions, this mixing ratio is only indicated at the end of the list of ingredients with the expression *w^cr.t r w^cr.t* (literally “part to part”, that is, “in equal parts”⁴⁹).⁵⁰ Only in 13 (13.5%) prescriptions are the mixing ratios somewhat more complicated; they contain various whole number volumes and fractions.⁵¹ Liquids and consistency-giving substances (e.g. oil, honey) were often freely added depending on the desired consistency. For simple solid-liquid or liquid-liquid mixtures, any dose information can be missing.⁵²

The following table shows a descriptive-statistical analysis that shows the frequency of the individual medical indications in the Eye Book and the modes of administration of the remedies at a glance.

⁴⁷ Likewise, other authors translated this unit simply as “1” (Lalanne and Métra) or “1 dose” (Popko [online]).

⁴⁸ In general, in the Ebers Papyrus, the simple “equal parts”-dosage ratio of ingredients predominates in remedies for external administration. For orally administered remedies, dosage information is rather given as numbers ≥ 1 or fractions.

⁴⁹ Hannig, 199 (7109); Wb I, 288.1.

⁵⁰ Eb 386–388, 390, 393–395.

⁵¹ Eb 367, 369, 377, 391, 398, 400, 401, 409–413, 416 (these are mainly prescriptions against secretion, the *3dt/3dy.t* disease, or for improvement of the eyesight). Maybe they were contributed by a specific author.

⁵² E.g. Eb 357, 358, 399, 404, 405, 406, 408, 414, and others.

Table 1: Statistics

Medical indication ⁵³	Own interpretation	Number of pre-prescriptions explicitly for this indication	Number of pre-prescriptions implicitly for this indication ⁵⁴	Total number of pre-prescriptions for this indication	Both eyes are affected ⁵⁵	Mode of administration of the remedy in relation to the eye(s)					
						in/in the center	towards	onto the outside of the eyelids ⁵⁶	as eye make-up	other instruction ⁵⁷	no instruction
						m/m- <u>hnw</u> jr.t/jr.t.j	r jr.t/jr.t.j	r s ³ nj jr.t/jr.t.j	sdm		
whd.w ⁵⁸	Generally: efflorescences; in the eyes: conjunctival lymph follicles (e.g. in trachoma)	3	0	3	2			1	1	1	
thn	Puncture or scratch wound	3	1	4	0	1		1		2	

⁵³ In the order of appearance in the Ebers Papyrus.

⁵⁴ So-called “k.t-prescriptions”, i.e. prescriptions that only have the title “Something else” (k.t) or “Another eye make-up” (ky sdm). They are viewed by me (and other authors) as an alternative treatment for the aforementioned eye condition.

⁵⁵ Criteria: Both eyes are mentioned in the title, or it is a “k.t-prescription” after both eyes have been mentioned in the aforementioned full title, or the prescription is intended to improve eyesight. If both eyes are to be treated, it cannot be concluded with certainty that both eyes are diseased (see for instance the prescriptions in Eb 345, 349, 355, 382, 409, and 430).

⁵⁶ The interpretation of r s³ nj jr.t.j is controversial (Popko [online], Eb 340 note 3). In Eb 381, as an exception, it is hr s³ jr.t.j. I think, the term s³ jr.t.j primarily means the outside of the upper eyelids.

⁵⁷ Includes special ways or sites of administration of the remedy.

⁵⁸ Includes whd.w and rwḏ.t nj.t whd.w.

Medical indication ⁵³	Own interpretation	Number of pre- scriptions explicitly for this indication	Number of pre- scriptions implicitly for this indication ⁵⁴	Total number of pre- scriptions for this indication	Both eyes are affected ⁵⁵	Mode of administration of the remedy in relation to the eye(s)					
						in/in the center m/m- <u>hnw</u> jr.t/jr.t.j	towards r jr.t/jr.t.j	onto the outside of the eyelids ⁵⁶ r s ³ nj jr.t/jr.t.j	as eye make-up sdm	other instruction ⁵⁷	no instruction
ḥ3t.j	Blurred vision	2	1	3	1			2		1	
m33 ⁵⁹	Eyesight (to be improved)	9	6	15	15	4	1	4	5	1	
s3q dfd	Contraction of the pupil	1	0	1	0		1				
wh3.wt	Rash	1	0	1	1			1			
s.hd.w	Corneal scars	4	4	8	7	5	1	2			
znf/snf ⁶⁰	Paraphrase of severe inflammatory redness of the conjunctiva	5	0	5	4	2		1		2	

⁵⁹ Includes m33, wb3 m33, srwh m33, and s.rwd m33.

⁶⁰ Includes snf m jr.t, znf m jr.tj, and znf hr jr.tj.

Medical indication ⁵³	Own interpretation	Number of pre- scriptions explicitly for this indication	Number of pre- scriptions implicitly for this indication ⁵⁴	Total number of pre- scriptions for this indication	Both eyes are affected ⁵⁵	Mode of administration of the remedy in relation to the eye(s)					
						in/in the center m/m- <u>h</u> nw jr.t/jr.t.j	towards r jr.t/jr.t.j	onto the outside of the eyelids ⁵⁶ r s ³ nj jr.t/jr.t.j	as eye make-up sdm	other instruction ⁵⁷	no instruction
nh ³ .(w)t ⁶¹	Papules (in trachoma) or „the aggressive ones“ (severe infection, invasive tumor)	3	0	3	2	1		1		1	
š ³ (r).w	Epithelial defects of the cornea	1	0	1	1		1				
t ³ .w ⁶²	Burning sensation in the eyes due to epithelial defects of the cornea	3	0	3	2	1		2			
qn.t	<i>Pinguecula, pterygium</i>	2	0	2	1		1	1			
pds.t	<i>Hordeolum, chalazion</i> , small, spherical eyelid tumor, or corneal foreign body	3	0	3	0			1	2		
šp.t	Blindness	3	1	4	3	1		2		1	

⁶¹ Includes nh³.wt and nh³.t.

⁶² Includes t³.w and swš nj t³.w.

Medical indication ⁵³	Own interpretation	Number of pre-scriptions explicitly for this indication	Number of pre-scriptions implicitly for this indication ⁵⁴	Total number of pre-scriptions for this indication	Both eyes are affected ⁵⁵	Mode of administration of the remedy in relation to the eye(s)					
						in/in the center m/m- <u>hnw</u> jr.t/jr.t.j	towards r jr.t/jr.t.j	onto the outside of the eyelids ⁵⁶ r s ³ nj jr.t/jr.t.j	as eye make-up sdm	other instruction ⁵⁷	no instruction
m ^{3c}	Temple headache or temporal arteritis	1	2	3	NA ⁶³					3	
3d.t/3dy.t	Decay (smelly ulcerating process)	3	10	13	0	2	6	3		2	
hnt m jr.tj	Secretion from both eyes	1	0	1	1	1					
bjdj	Possibly a special kind of visual disturbance	1	0	1	1				1		
dfdf.t	Watery eye (excessive tear flow, <i>epiphora</i>)	1	0	1	0		1				
⁶ h.t nj.t mw	Glaucoma or nasolacrimal duct obstruction	2	2	4	4	1	1	1	1		
hnt	Secretions (from eyes or nose)	1	0	1	ND ⁶⁴						1
j ^h .wt nb.wt dw.wt	„All evil things“	1	0	1	0				1		

⁶³ NA = not applicable.

⁶⁴ ND = not determined.

Medical indication ⁵³	Own interpretation	Number of pre- scriptions explicitly for this indication	Number of pre- scriptions implicitly for this indication ⁵⁴	Total number of pre- scriptions for this indication	Both eyes are affected ⁵⁵	Mode of administration of the remedy in relation to the eye(s)					
						in/in the center m/m- <u>h</u> nw jr.t/jr.t.j	towards r jr.t/jr.t.j	onto the outside of the eyelids ⁵⁶ r s ³ nj jr.t/jr.t.j	as eye make-up sdm	other instruction ⁵⁷	no instruction
šsm.w dšr(.w)	Inflammatory redness	1	0	1	1			1			
kk.w	Night blindness	1	0	1	1			1			
h ³ (r).w	Strabismus with or without amblyopia of one eye	1	0	1	1			1			
qnj.t	Blunt eye trauma or incipient jaundice	1	1	2	ND			2			
hnt m fnd	Secretion from the nose (rhinitis)	1	0	1	NA				1		
hsf.w nj h ^c .w	Adhesions of the eyelids	1	0	1	1		1				
w ^c f šnj.w	Eyelashes bent inwardly (<i>trichiasis, entropion</i>)	1	0	1	0					1	
tm rd(.w) r(w)ḏ šnj	Preventing regrowth of a plucked eyelash	2	3	5	0					5	

Medical indication ⁵³	Own interpretation	Number of pre-prescriptions explicitly for this indication	Number of pre-prescriptions implicitly for this indication ⁵⁴	Total number of pre-prescriptions for this indication	Both eyes are affected ⁵⁵	Mode of administration of the remedy in relation to the eye(s)					
						in/in the center m/m- <u>h</u> nw jr.t/jr.t.j	towards r jr.t/jr.t.j	onto the outside of the eyelids ⁵⁶ r s ³ nj jr.t/jr.t.j	as eye make-up sdm	other instruction ⁵⁷	no instruction
Seasonal ⁶⁵	(ND) ⁶⁶	3	1	4	ND	1	1	1	1		
Individual ⁶⁷	ND	2	0	2	1				1		1
Total		68	32	100 ⁶⁸	50	20	15	29	14	20	2

⁶⁵ Prescriptions specifying a seasonal period in which the remedy can be made.

⁶⁶ Only in one case is the medical indication stated, namely “strengthening of the eyesight”.

⁶⁷ Prescriptions made for a specific patient or communicated by a specific person.

⁶⁸ With this total number of medical indications, all blue figures can be taken as both, absolute and percentage results. The difference to the number of prescriptions in the Eye Book (= 96) is explained by three prescriptions, each intended for two or three indications.