

Articoli/Articles

DE OCTIMESTRI PARTU AND PATHOLOGY
OF THE LAST TRIMESTER OF PREGNANCY

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SUMMARY

DE OCTIMESTRI PARTU AND PATHOLOGY
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The Hippocratic Treatise De Octimestri Partu has been transmitted in two separate parts, regarding deliveries at the seventh month and eighth month, respectively. The thesis is that fetuses delivered after the seven month of pregnancy survive, whereas after eighth month not. The explanation given that during the eighth month a sickness of the mother damages the fetus, so that he cannot survive suffering of delivery.

The analysis of the text evidences that two different terms, e.g. νόσος and κόπος, have been used, the first one associated to pathological events, the second to sufferings for delivery. The unfavourable prognosis for the disease of the eighth month is due to a sickness of the mother during the 6th quarantine: terms used put forth the opinion that the disease is due to hemodynamic changes.

Epidemiological research on the current pathology of the last trimester of pregnancy shows a performance of cesarean section ranging between 18% (national average) and 90% (eclampsia in main hospitals). The only deadly condition which occurs during the eighth month seems to be gravidic hypertension or mild preeclampsia, conditions which do not allow the fetus to reach the ninth month when cesarean section was not available.

Thus, the disease of the eighth month described in the Hippocratic treatise seems to be mild preeclampsia, i.e. gravidic hypertension

In the Codices antiqui concerning the *Corpus Hippocraticum* (C.H.), e.g. *Codex Marcianus Venetus graecus 269 (M)* and *Codex Vaticanus graecus 276 (V)*, are reported two treatise relating

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an unfavorable prognosis for delivery during the 6th quarantine, i.e. the eighth month of pregnancy¹.

The works are currently reported by quotation of the argument of each:

- περί ἑπταμήνου - *De Septimestri Partu* - The Seven Months' Child

- περί ὀκταμήνου - *De Octimestri Partu* - The Eight Months' Child

The order of copying of these works in the manuscripts is different for *M* and *V* (*M*: first *De Septimestri Partu*; *V*: first *De Octimestri Partu*), leading a philological debate which involves also the meaning of the two Treatises².

Littré followed *M* 269 and believed the two treatises as part of a single work, so that he numbered chapters in a single series³. Doubts about the order chosen by Littré has been raised first by Jurk, then by Kahlenberg⁴, and recently discussed on the basis of Arabic manuscripts which report the Treatise⁵.

The 1970 edition by Joly (2) agrees with the opinion of Littré about the succession of chapters, whereas Hans Grensemann believes that the true original order of the only work is similar to that reported in the *Codex Vaticanus* gr. 276, first *De Octimestri Partu*, then *De Septimestri Partu*. Grensemann notes that ancient works currently begin dealing the aim, which may be found in the chapter 9 of edition by Littré: thus, this part should be considered the beginning of the Treatise (2).

The logic of meaning developed by the Author is the explanation of medical reasons of the lower viability of children delivered at the eighth month of pregnancy. During this period, a sufferings due to changes of position of the fetus are superimposed to a disease of the mother for distressing the umbilical cord, so that fetuses run high risk of death. A critical philological analysis may be useful to understand the real meaning of the Hippocratic Author.

The Treatise clearly shows that during pregnancy there are periods favourable for viability of fetuses and unfavourable quarantines, i.e. the eighth of pregnancy:

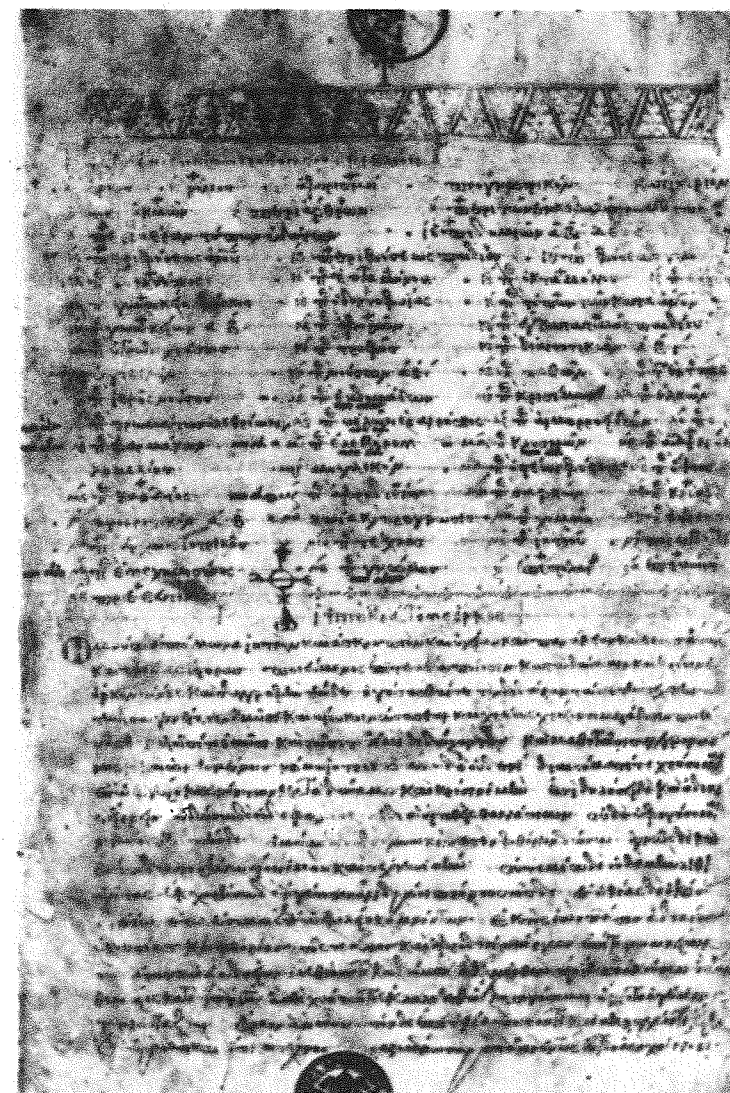


Fig. 1. Codex Vaticanus Graecus 276 (V 276)

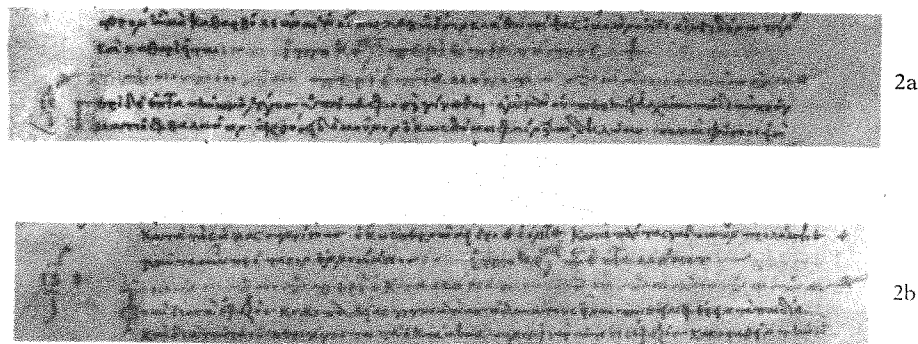


Fig. 2. Incipit of De Septimestri Partu (a) and De Octimestri Partu (b) — Codex V 276

about the delivery of the eighth month, I believe that two diseases which occur one after the other make unfavourable ending of children. Thus, babies of eight months don't survive... (Li., ch. 10).

This part corresponds to the beginning of the Treatise in the edition by Grensemann. If fetuses are not viable, an explanation is given:

In this quarantine they suffer ... for coming from the previous place of nourishment, then distressing the umbilical cord and finally for the sufferings of the mother. Actually, stretching of membranes and displacing of umbilical cord causes spasms to the mother many women have fever and some even die with their fetus ... the fetus who borns during this quarantine cannot survive because the stress of the birth is superimposed to his disease in the womb (Li., 3).

The syndrome derived from two different conditions, due to a disease of the mother and to distressing for delivery:

(babies) suffer from the mother as well as from delivery... (Li., 10).

Thus, a philological analysis of the used terminology and meaning in classical writings may be helpful to explain ancient medical thought about the disease of the eighth month.

Sufferings (*πόνος*) and disease (*νοῦσος*)

The terms which have been used to indicate the different conditions, which cause the of the eighth-month fetuses, are clearly suggestive for a action of sufferings for delivery a disease of the mother.

The two terms which are involved are *νόσος* (ionic *νοῦσος*) and *πόνος*.

In the classical works sickness is expressed in many ways. "No, it is the lost man I ache (*πόθος*) to think of Odysseus" (HOMER, The Odyssey, 14, 144), says the faithful swineherd Eumaios offering wine to the not-recognized guest. On the same kind, Antikleas answered to Odysseus that a deadly psychosomatic disease killed her:

He lies now even so, with aching heart, and longs for your return, while age comes on him. So I, too, pined away, so doom befell me, not that the keen-eyed huntress with her shafts had marked me down and shor to kill me; not that illness (*νοῦσος*) overtook me, no true illness wasting the body to undo the spirit; only my loneliness (*πόθος*) for you, Odysseus, for your kind heart and counsel, gentle Odysseus, took my own life away (HOMER, Odyssey 11, 195-203).

This is a deadly wish quoted many times (*πόθῳ θανεῖν*, which is "to die for a regret", EURIPIDES, Andromaché 824), different from a physical disease, which is "*νοῦσος*", a term is used when a true disease should be indicated. Significant is that this word has been used by the Author of *De Morbo Sacro* to stress just at beginning of the Treatise that this is a normal and not sacred disease:

I am about to discuss the disease (*περὶ τῆς ἱερῆς νοῦσου...*) called sacred. It is not, in my opinion, any more divine or more sacred than other diseases (*τῶν ἄλλων θειοτέρη εἶναι νοῦσων*, but has a natural cause... (C.H., *De Morbo Sacro* I).

From the indoeuropean root "pen", which means tension, stress derived greek words, like *πένομαι* and *πόνος*. *Πένομαι* means "to do all one can" (e.g. to obtain something), also with labour⁶. It is with Hippokrates that the meaning of *πόνος* as suffering different from a disease *νοῦσος* is well established, whereas *νόσημα* is an individual disease.

And in *De Octimestri Partu* the two terms, *νοῦσος* = sickness and *πόνος* = suffering, are widely used.

Together these words, we found associated other terms, such as *πάθος*, *κακοπάθεια* and *μεταβολή*.

Πάθος is derived from *πάσχω* (latin *patior*) meaning a sense of passivity, undergoing or suffering (PLATO, *Symposium* 198 b). Only with the prefix *κακός* the prevailing negative sense was consolidated with a sense of damage of the body, which becomes a disease⁷.

Μεταβολή is derived from *μεταβάλλω*, which literally is "to throw with" meaning a sense of change or transformation. *Μεταβολή τῆς ἡμέρας* is the turning of a day (Thucydides 6, 17), whereas *μεταβολή τῆς ἡλίου* is the eclipse of the sun (PLATO, *Politicus* 271). The meaning of change may be found also as removal of something, including a bad think or sickness⁸.

In the Treatise *De Octimestri Partu* these terms are significantly associated together in the same sentence, as summarized in Table I.

The main associations which may be found are:

a) *πόνος-μεταβολή*, used when the Author speaks of the quarantines, experience of women or deliveries with survival of the fetus;

b) *νοῦσος-πάθος-κακοπάθεια*, used when a double suffering is quoted, e.g. of the mother and fetus, and the sickness of the eighth month, critical days or danger of death of the fetus are described.

The thought of the Hippocratic author on the disease of the eighth month may be clearly argued analyzing such associations

Table I. Occurrence of words dealing a pathological condition in the various chapters of *De Octimestri Partu*. Chapters are indicated following the order stated by Littré (number and running argument are reported).

a) words	πόνος	μεταβ-	νοῦσος	πάθος	κακοπατη-	θανατη-	αποστη-
01 7th month fetus	0	0	0	0	0	0	0
02 7th month delivery	1	1	2	0	2	0	1
03 dangerous quarantine	2	0	0	0	0	0	0
04 women's experience	2	0	0	0	0	0	0
05 8th month disease	0	1	6	0	4	0	1
06 9th month delivery	0	0	0	0	0	0	0
07 full term delivery	0	0	2	0	0	0	0
08 8th month suffering	0	0	2	1	1	0	0
09 critical days	0	1	6	0	1	2	0
10 8th month delivery	2	1	3	0	3	0	0
11 swelling in delivery	0	0	1	0	0	0	0
12 in-out environment	1	0	1	0	0	0	0
13 so-called 11th month	0	0	0	0	0	0	0

b) relationship between occurrence of *πόνος, μεταβολή* and *νοῦσος, πατη-* (the root *πατη-* includes the words *πάθος, κακοπατη-, θανατη-*).

Chapters	πόνος	μεταβολή	νοῦσος	πατη-
03	2	2	0	0
05-08-09	0	0	14	9

of words. In fact, a difference is outlined between two different conditions. A physiological suffering (*κατὰ φύσιν. πόνος*) is due to various periods of pregnancy and changes (*μεταβολαί*) related to critical periods. The second condition is a pathological status of the mother; the disease (*νοῦσος*) of the mother (*ἐν τῇ μήτρῃ* which literally is: in the uterus) influences the fetus so that he has a serious ill (*κακοπάθεια*) and combination of suffering and disease causes the death, just during the eighth month of pregnancy. It is worth noting that the association of clear pathological term (*νοῦσος*) with an inner sickness of pregnancy may be found in Soranus' *Gynaecia*, in both editions by Ermerins and Ilberg:

αἱ δὲ διὰ νόσον τῆς μήτρας ... (Book III, 7), meaning a disease of the uterus.

Paleopathology of pregnancy

Indications about diseases in antiquity may be obtained by a paleopathological analysis of human remains⁹. As far as pregnancy is concerned, lesions due to deliveries may be observed in bones of pelvis, particularly as marks of haemorrhages in the junctions between hip bones¹⁰.

To diseases of women was dedicated a celebrated work of Soranus of Ephesus (2nd century A.D.) on obstetrics and gynecology¹¹. It should be remembered that the viewpoint of Soranus was that of an obstetrician, so that no attention was given to problems of fetus or perinatology.

A so called puerperal insanity may be recognised in "Coan Prognosis" and a case of drowsiness, headaches and convulsions during pregnancy may be interpreted as a case of toxæmia. To a preeclampsia is probably due the Caesarean section shown in the pre-Columbian Mexican statuette of the Weisman collection¹² and in Ancient Mesopotamia toxæmia and oedema in pregnancy have been found, as described by WILSON¹³.

The most important paleopathological finding is the case of a woman, dead during pregnancy. The bones of the fetus are set down on the spinal column of the mother. The mineralization and size of the fetal bones allow to state that it is a fetus at the eighth month of pregnancy (Fig. 3). It is very difficult to ascertain the cause of death; a breech position may be observed, thus indicating that a difficult breech delivery or a pathological condition before version occurred¹⁴. However, it is worth noting that this case shows a pathological condition of the mother with death of the fetus (and probably also of the mother): this eighth month sickness is the only known paleopathological case. Despite difficulties to state the nature of the disease, age and position of the foetus are compatible with a toxemic status.

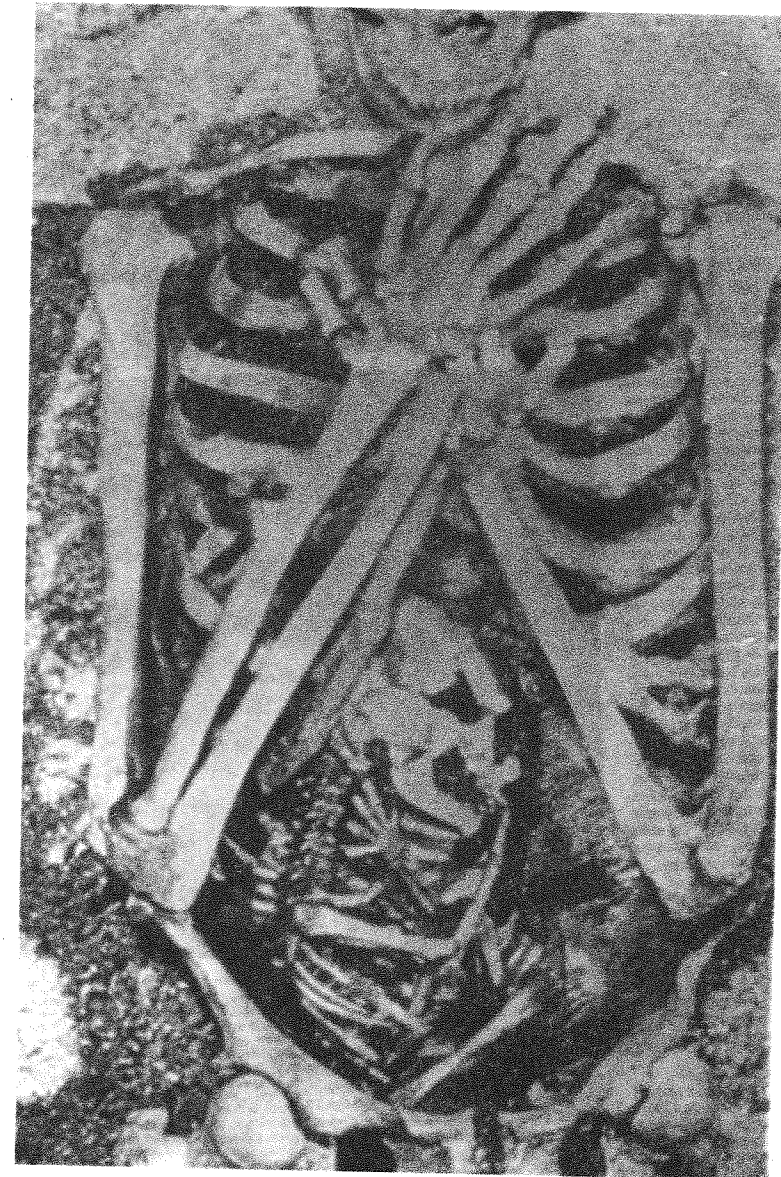


Fig. 3. Paleopathological finding of eighth month pregnant woman with fetus

Epidemiological findings

A question arises. Is it possible to evidence a sickness, which may explain the eighth month syndrome?

If so, which epidemiological method should be followed to explain, with today's data, pathological events of antiquity?

Two points may be evidenced: we should have data about the occurrence of a pathology typical of the eighth month of pregnancy with danger for the life of fetus and, secondly, we need correct data to reach medical conditions of antiquity. The parameter which we have chosen for correction is the occurrence of Cesarean sections, which in emergencies are widely used today and were absolutely unusual in ancient time.

We should consider also that an evolution in the behaviour of women about deliveries may be found in the last century: hospitalization was dramatically increased, particularly in European and white-american population. An excellent historical study on maternal mortality and obstetric care has been recently published, illustrating two periods of safety in deliveries, before the second world war in which it was safer parturition at home by a well-trained midwife and the years after the war in which hospitalization became prevalent and condition for deliveries much more safe in the divisions of obstetrics¹⁵.

An interesting observation is that despite a different rate of home deliveries between white and non-white population (e.g., USA South Carolina 1945-46 1.7% versus 15.7%) and a higher rate of mortality in non-white population (USA 57.5 deaths per 10,000 births in white population versus 108.1; South Carolina 66.2 versus 103.4) causes of maternal deaths are similar in the two groups. South Carolina is a rural State and white and non-white population are represented; because it is generally accepted that social custom of urban/rural areas and white/non-white population differs in evolution, data which appear stabilized may be useful to understand trends of morbidity. It is worth noting that gravidic toxemia (i.e. albuminuria and eclampsia) is found to be the first cause of maternal deaths, reaching the

percentage of 43.0 and 36.2 of total maternal deaths in white and non-white population, respectively. Sepsis and haemorrhage occurred in a significant lower rate (about 25% and 15%, respectively).

Thus, we have pointed attention on the epidemiology of gravidic toxemias in the hospitalized population.

Data have been collected from a district hospital, situated in a valley within a hilly region, so that parturient women usually reach that hospital to avoid distressing due to transport outside the flat roads of the valley. The chosen hospital was the district hospital of Gubbio, in the middle inner part of Italy.

Results are shown in Table II: pathologic conditions of pregnant women at the admission to the hospital are divided for stage of toxemia, i.e. gravidic hypertension, preeclampsia and eclampsia. It is worth noting a significant higher rate of occurrence of toxemias during the eighth month of pregnancy, respect to the seventh or ninth month. It should be noted also that Cesarean section has been adopted in about 50% of cases.

Table II. Distribution of gravidic toxemias during the last trimester of pregnancy in the District Hospital of Gubbio (by courtesy of dr. O. Cardoni).

Legends: No.: progressive number; Patient: Initials of Name and Surname/Year; Diagnosis: H: gravidic hypertension, P: preeclampsia, E: eclampsia, number shows the month of pregnancy; Notes: Month of delivery, Death of mother (Dm), Death of fetus (Df), Cesarean section (Cs), Normal delivery (Nd).

No.	Patient	Diagnosis	Notes
01	BG/80	H/8	8/Cs
02	TG/80	H/8	8/Nd
03	PR/81	H/7	8/Df
04	BM/82	H/9	9/Nd
05	CS/82	H/9	9/Cs
06	TG/82	H/7	8/Cs
07	MP/82	H/7	7/Cs
08	BM/82	H/8	8/Cs
09	MP/82	H/7	8/Nd
10	PL/82	P/7	7/Cs
11	TD/82	H/8	8/Nd
12	CR/82	H/8	8/Nd
13	SG/83	H/8	9/Nd
14	FG/83	H/9	9/Nd

Tab. II

No.	Patient	Diagnosis	Notes
15	PP/83	H/9	9/Nd
16	RR/83	P/8	8/Cs
17	FF/83	H/8	8/Cs
18	CM/83	H/9	9/Cs
19	VG/83	H/8	8/Cs
20	SM/84	H/9	9/Nd
21	DL/84	H/8	8/Cs
22	MM/84	H/9	9/Cs
23	NI/84	H/8	8/Cs
24	MA/84	H/8	8/Cs
25	SE/84	H/8	8/Nd
26	TP/84	H/8	8/Nd
27	BG/84	H/8	8/Nd
28	BL/84	H/9	9/Nd
29	BP/84	H/9	9/Nd
30	PF/84	H/9	9/Nd
31	FL/85	H/8	8/Nd
32	NM/85	H/9	9/Cs
33	VG/85	H/9	9/Nd
34	CF/85	H/8	8/Nd
35	GD/85	H/9	9/Cs
36	IC/85	H/8	8/Cs
37	MF/85	H/8	8/Cs
38	FD/85	H/9	9/Cs
39	TF/85	H/9	9/Cs
40	ME/85	H/9	9/Cs
41	BM/85	H/8	8/Cs
42	GE/86	H/8	8/Nd
43	BA/86	H/7	7/Cs
44	BI/86	H/9	9/Nd
45	NN/86	H/8	8/Cs
46	PD/86	H/9	9/Cs
47	PM/86	H/7	8/Cs
48	TO/86	H/8	8/Cs
49	FF/86	H/8	8/Cs
50	BE/87	H/7	8/Nd
51	SM/87	H/9	9/Cs
52	FS/87	H/8	8/Nd
53	BM/87	H/8	8/Cs
54	PI/87	H/8	8/Cs
55	NM/87	H/7	8/Cs
56	BC/87	H/7	8/Cs
57	MT/87	H/8	8/Cs
58	VC/87	H/9	9/Cs
59	MD/87	H/8	8/Nd
60	CS/87	H/8	8/Cs

Table III. Distribution of gravidic toxemias during the last trimester of pregnancy in the Regional Hospitals of Perugia-Terni (by courtesy of dr. Gilardi).

Legends: No.: progressive number; Patient: Initials of Name and Surname/Year; Diagnosis: H: gravidic hypertension, P: preeclampsia, E: eclampsia, number shows the month of pregnancy; Notes: Month of delivery, Death of mother (Dm), Death of fetus (Df), Cesarean section (Cs), Normal delivery (Nd).

No.	Patient	Diagnosis	Notes
01	FM/89	P/8	8/Cs
02	AU/89	P/9	9/Cs
03	GC/89	H/7	8/Cs
04	PB/89	H/9	9/Nd
05	RS/89	H/8	8/Cs
06	DT/89	H/9	9/Nd
07	CM/89	H/8	8/Cs
08	GP/89	H/9	9/Nd
09	ME/89	P/7	7/Cs
10	MF/89	H/8	8/Cs
11	LT/89	H/8	8/Cs
12	GM/89	P/9	9/Nd
13	MG/89	P/9	9/Cs
14	MG/89	H/9	9/Cs
15	DB/89	P/8	8/Cs
16	GV/89	H/8	8/Cs
17	MR/89	H/9	9/Nd
18	AM/89	H/9	9/Cs
19	RS/89	P/8	8/Df
20	SC/89	H/9	9/Nd
21	PT/89	H/9	9/Cs
22	MM/89	P/8	8/Cs
23	MP/89	H/9	9/Cs
24	LL/89	P/8	8/Cs
25	DB/89	P/9	9/Nd
26	RB/89	P/8	8/Cs
27	MD/89	H/9	9/Nd
28	SP/89	H/9	9/Cs
29	MP/89	P/9	9/Cs
30	RG/89	H/9	9/Nd
31	SB/89	H/8	8/Cs
32	AC/89	H/9	10/Cs
33	PP/89	H/9	9/Cs
34	GS/89	P/8	8/Cs
35	SR/89	E/7	7/Df
36	PP/89	H/9	9/Nd
37	AG/89	H/8	8/Cs
38	MM/89	P/9	9/Cs
39	RM/89	H/8	9/Nd
40	LM/89	H/9	9/Cs

Table IV. Distribution of gravidic toxemias during the last trimester of pregnancy in the Regional Hospital of Trento.

Legends: No.: progressive number; Patient: Initials of Name and Surname/month of Year 1988; Diagnosis: H: gravidic hypertension, P: preeclampsia, E: eclampsia, number shows the month of pregnancy; Notes: Month of delivery, Death of mother (Dm), Death of fetus (Df), Cesarean section (Cs), Normal delivery (Nd).

No.	Patient	Diagnosis	Notes
01	SG/88	H/8	8/Cs
02	AG/88	P/8	8/Cs
03	FN/88	H/9	9/Cs
04	VC/88	H/9	9/Cs
05	BM/88	H/9	9/Cs
06	BM/88	E/7	8/Cs
07	MP/88	H/9	9/Nd
08	ZA/88	H/8	8/Nd
09	MP/88	H/7	8/Cs
10	BC/88	H/8	8/Cs
11	PP/88	E/9	9/Cs
12	TL/88	E/7	7/Cs
13	MS/88	H/8	9/Nd
14	RO/88	H/8	8/Nd
15	ZL/88	E/7	8/Cs
16	GM/88	H/7	7/Cs
17	OE/88	H/9	9/Cs
18	RT/88	H/9	9/Cs
19	OG/88	H/9	9/Cs
20	BR/88	H/9	9/Cs
21	TP/88	H/9	9/Cs
22	PL/88	E/8	8/Cs
23	BS/88	H/8	8/Cs
24	BI/88	H/7	7/Cs
25	PL/88	H/9	9/Cs
26	SM/88	H/9	9/Cs
27	ME/88	H/9	9/Cs
28	RL/88	E/7	7/Cs
29	RD/88	H/9	9/Cs
30	FM/88	H/9	9/Cs
31	PE/88	H/9	9/Cs
32	TC/88	H/7	7/Cs
33	BP/88	H/9	9/Cs
34	CK/88	H/8	8/Cs
35	PA/88	H/9	9/Cs
36	PG/88	H/7	7/Cs
37	GM/88	H/7	7/Cs
38	FC/88	E/8	8/Cs

These data seem to support the idea that the Eighth month disease may be a mild toxemic disease (eclampsia may be not considered, because the Hippocratic author never quotes symptoms such as epilectiform attacks).

To confirm this hypothesis we need ask how many women reached in antiquity the ninth month if affected by this pathology. An indirect answer to this question may be taken by epidemiological data from more important hospital, such as general hospitals. Data which have been collected from the Regional Hospitals of Perugia and Trento are shown in Table III and IV. A shift to more advanced disease (i.e. from gravidic hypertension to preeclampsia) is observed, together with an increase to a recourse to the Cesarean sections.

Table V summarizes data of different stages of the diseases observed in the various months of the last trimester of pregnancy: linear regression analysis of occurrence of toxemias versus recourse to Cesarean section indicates that when a surgical treatment was not available in a usual way, like in antiquity, expectance to reach the ninth month was very low, i.e. less 10% of affected pregnant women.

We believe that may be that the Hippocratic author has described preeclampsia, when he has spoken of unviability of fetus of eight months if two conditions are superimposed: a

Table V. Toxemias of last trimester of pregnancy in the Hospital of Gubbio, Perugia and Trento. Relationship between type of pathology (H=Hypertension, P=preeclampsia, E=Eclampsia) and month of pregnancy. Data are expressed as percentage of total cases.

Diagnosis' month	Nd Cs Df			H	P	E			
	7	8	9						
Gubbio	16.7	50.0	33.3	38.3	60.0	1.7	96.7	3.3	0.0
Perugia	7.5	37.5	55.0	27.5	62.5	5.0	62.5	35.0	2.5
Trento	23.6	29.0	47.4	10.5	89.5	0.0	79.0	2.6	18.4

Deliveries are expressed as Normal delivery (Nd), Cesarean section (Cs), Death of fetus (Df). All deaths of fetuses occurred during the eighth month.

disease, and in particolare an hemodinamic disease, of the mother and difficulties of delivery. This belief can be traced for centuries, in Western as well in Arabian or in Arabic obstetrics¹⁶, so that it is very surprising to be based only on a superstition or astrology. Thus, a sickness, a true sickness, was that descibed by the author of *De Octimestri Partu*.

NOTES AND BIBLIOGRAPHY

¹ Manuscripts which report the two treatises are:

a) Codices antiqui

— Marcianus Venetus gr. 269 X Century (M)

— Vaticanus gr. 276 XII Century (V)

b) Codices recentiores

— Parisinus gr. 2140 XIII Century (I)

— Parisinus gr. 2141 XV Century (G)

— Parisinus gr. 2142 XIV Century (Hb)

— Parisinus gr. 2143 XIV Century (J)

— Parisinus gr. 2144 XIV Century (F)

— Parisinus gr. 2145 XV Century (K)

— Parisinus gr. 2146 XVI Century (C)

— Parisinus gr. 2254 XV Century (D)

— Baroccianus gr. 204 XIV Century (O)

— Urbinas gr. 68 XIV Century (U)

— Vaticanus gr. 277 XIV Century (R)

— Vaticanus gr. 278 1512 A.D. (W)

— Vaticanus Palat. gr. 192 XV Century (P)

— Laurentianus plut. 74,1 XV Century (L)

— Monacensis gr. 71 XV Century (Mon)

— Ambrosianus C 85 sup. 187 XVI Century (S)

— Bodleianus Holkhamensis gr.282 XVI Century (Ho)

— Hauniensis ant. fund. reg. 224 XVI Century (Haun)

— Mutinensis gr. 227 (II H 12) XVI Century (Mut)

The two Treatises are reported also in the Index of the Manuscript *Vaticanus* gr. 276, in the Aldine Index (Aldina, editio princeps, 1526) and in Index of the edition of Foes (Anutius Foesius, 1595).

The two Treatises have been quoted by Galen (Commentaries to Epidemics II,3,17 - *Corpus Medicorum Graecorum* V,10,1 pp. 300-304), who believed that the Author of *De Septimestri Partu* has been Hippocrates, whereas of *De Optimestri Partu* has been Polybos.

About the fatherhood see also: JOUANNA J., *Le Médecin Polybe est-il l'Auteur du plusieurs ouvrages de la Collection Hippocratique?* Revue des Études Grecques 82 (1969) 552-562; JOUANNA J., *Tradition manuscrite et structure du Traité Hippocratique sur le foetus de huit mois.* Revue des Etudes Grecques 86 (1973).

² The two Treatises have been edited on the basis of the Codices *M* and *V* (*M*: folios 385r-387v *De Septimestri Partu*, folios 388r-389r *De Octimestri Partu*; *V*: 122v-123r *De Octimestri Partu*, folios 123r-124r *De Septimestri Partu*) by several Authors.

LITTRÉ E., *Oeuvres Complètes d'Hippocrate*, J.B. Bailliere, Paris, 1839-1861. The text of the two Treatises, derived from *M*, is reported in the Vol.VII, pp. 436-452 and 452-460, respectively).

Critical editions have been recently done by:

GRENSEMANN H., *Hippocratis De Octimestri Partu - De Septimestri Partu. Corpus Medicorum Graecorum* I 2,1, Akademie Verlag, Berlin, 1968.

JOLY R., *Hippocrate: Du Foetus de huit mois.* Les Belles Lettres, Paris, 1970, pp. 147-181.

³ LITTRÉ E., 1839, op. cit., vol. 7, p. 432: "J'ai reuni ces deux opuscules, parce évidemment ils n'en font que un ; et, en passant de l'un à l'autre, je n'ai pas recommencé la série des numéros des paragraphes."

Littré has used for his edition *Codices Parisini*, derived from M 269. Only the Codex Parisinus gr. 2146 (C) has a different order, because derived from V 276. But Littré overlooked this fact.

⁴ JURK J., *Ramenta Hippocratea*, Thesis, Berlin, 1900, p. 59, note 1; KAHLENBERG W., *Hippokrates περί έπταμήνων und περί δέκαμήνων*. *Hermes* 85 (1957) 379-380.

⁵ IRMER C., *Monacensis Arabicus 805 und Scorialensis Arabicus 888: zwei Arabische Bearbeitungen zu De Octimestri Partu. Hippocratica - Colloquies Internationaux du CNRS No. 583, Centre Nationale Recherches Scientifique, Paris, 1980, pp. 259-264.*

⁶ About the meaning of the term "ponos" and related words, see: HOMER, *The Iliad* 24, 123-124 ... φίλοι... έπέοντο, which is: friends ... were busy at home they were busy with the preparations of dinner...

HOMER, *The Odyssey* 4, 624: ώς οί μέν περί δείπνον ένι μεγάροιςι πένοντο..., which means: Πόνος is a tiring work, an effort in wear (HOMER, *The Iliad* 5, 117) or a danger (*The Odyssey* 13, 301) and also a psychophysical suffering during a battle (*The Iliad* 6, 77). The sense of affliction or weakness may be found in other passages (*The Iliad* 2, 291; 21, 525). The turning point of meaning from misfortune to pain or suffering or disease may be found e.g. in the following passage:

ω Νέστωρ Νηληιάδη, μέγα κύνδος Ακχαιών, γνώσεαι Ατρείδην Αγαμέμνονα, τόν περί πάντων Ζεύς ένέκε πόνουσι διαμπερές ...

which is: Nestor, son of Neleus, big pride of Akhaians, know me for Agamemnon, son of Atreus, plunged by Zeus into the worst suffering a man could know... (*Iliad* 10, 87-89).

⁷ Examples may be found in the speeches of ANTIPHON (480-411 B.C.) about a suffering of the body (5,2,18) or a serious disease (3,2,11).

⁸ Μεταβολή κακών: EURIPIDES, *Hercules furens* 735.

⁹ CALVIN W., *Bones, Bodies and Disease*. Thames and Hudson, London, 1964.

¹⁰ CALVIN W., *An early case of birth injury*. *Dev. Med. Child. Neurol.* 6 (1964) 397-

¹¹ SORANUS OF EPHEBUS, *Gynecology*, translated by O. Temkin, Johns Hopkins Press, Baltimore, 1956.

See also: SORANI, *Gynaeciorum Libri IV edidit Ioannes ILBERG, C.M.G., Lipsiae et Berolini in Aedibus B.G. Teubneri, Berlin, 1927.*

¹² SANDISON A.T. and WELLS C., *Diseases of the Reproductive System*. in: BROTWELL D.R. and SANDISON A.T., *Diseases in Antiquity*, C.C. Thomas, Springfield, 1967, pp. 498-520.

¹³ WILSON J.V.K., *Organic Diseases in ancient Mesopotamia*. In: BROTWELL D.R. and SANDISON A.T., 1967., op. cit., p. 203.

¹⁴ The case has been discovered by Calvin WELLS, 1973, U.S.A. The paleopathological interpretation is due to dr. Luigi Capasso, Laboratory of Paleopathology, National Archeological Museum, Villa Comunale, Chieti. About the method of paleopathology and concept of pathocenosis, see: CAPASSO L., *L'origine delle malattie (The origin of the diseases)*, M. Solfanelli, Chieti, 1985.

¹⁵ LOUDON I., *Maternal Mortality: 1880-1950. Some Regional and International Comparisons*. *Social History of Medicine* 1 (1988) 183-228

¹⁶ BARKAI R., *A Medieval Hebrew Treatise on Obstetrics*. *Medical History* 33 (1988) 96-119

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SULLA SINOPSI DEI POLSI ATTRIBUITA A GALENO E A RUFO D'EFESO

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SUMMARY

On the synopsis of the cardiac pulses tributed to Galen and to Rufus d'Ephesus.

We wished to renew the study of such an important subject with the traslation and the comment on this synopsis. Besides we wished to realize if there were any differences with a previous translation made on a different text.

We did not find any outstanding diversity between the two texts and we could point out that the authorship of this synopsis is neitheir to be attributed to Galen nor to Rufus, but to an author who followed the principles of the Alexandrian Herophilus in the interpretation of the wrist.

Già in precedenza una ottima versione italiana del "Trattato dei polsi" è stata curata da Luigi Stroppiana utilizzando il testo latino dell'edizione giuntina.

Ciò nonostante si è ritenuto utile tradurre il testo partendo dall'originale greco. Del testo in questa lingua esistono due soli *manuscripti recentiores*, ambedue del XIV secolo, il *Laurentianus* (*Fiorentino Plut. 75 n.7*) ed il *Parisinus* (*Parisinus n.2193 appartenuto a Francois Asulanus*). Per questa traduzione è stato usato il manoscritto fiorentino (*Laurentianus*). La traduzione latina è precedente (XII sec.) e derivata probabilmente da altro manoscritto greco andato perduto.

Questa traduzione ha lo scopo di verificare la corrispondenza tra i due testi, sia dal punto di vista letterale che dottrinario, in quanto il testo latino è posto fra i libri spurii di Galeno ed il secondo, quello greco, fra le opere proprie di Rufo d'Efeso.

Parole chiave/Key words: Rufus - Galenus - Herophilus - De Pulsibus