

APPENDIX 3

*Phrenitis* from the Fifth Century BCE to the  
Twentieth Century CE: A Synoptic Table

	Bodily localization	Cause
Hippocrates (fifth century BCE) (Summary)	(not really a localization) Diaphragm Head Blood Stomach	Bile, phlegm Pressure on the diaphragm? Heating of the blood
<i>Morb.</i> 1.30		Heating of the patient's blood (haematocentrism)
<i>Morb.</i> 1.34		Cause of death: lack of nourishment, wasting, excessive phlegm, cold, death
Hipp. Fragment in <i>AP</i>	Brain	The brain is damaged by the blood around the chorioid meninx, which usually feeds it, being corrupted by bile
<i>Aff.</i> 10	Diaphragm	Bile settling against the diaphragm
<i>Aff.</i> 12	Random part (ἡ ἄν τύχη)	Accumulation of phlegm and bile
Diocles (fourth century BCE)	Inflammation of the diaphragm (φλεγμονή τοῦ διαφράγματος); thick, cold phlegm gathering around the offshoots that grow from the heart (καρδία)	Inflammation
Praxagoras (fourth century BCE)	Inflammation of the heart (φλεγμονή τῆς καρδίας); thick, cold phlegm gathering around the offshoots that grow from the heart (καρδία)	
<i>Anonymous Londinensis</i> (fourth century BCE)	<i>Logistikon</i>	
Heraclides of Tarentum (third–second centuries BCE)	Head The stomach can also be involved	Congestion of the head Heaviness when food is in the stomach Decomposition of the humours
Erasistratus (third century BCE)	Meninx (κατά τι πρέθος τῶν κατὰ τὴν μήνινγα ἐνεργειῶν)	

(cont.)

	Bodily localization	Cause
Asclepiades (second century BCE)	Meninges, membranes in general Stomach Brain Sensorial channels Generally delocalized	Stoppage or obstruction of the corpuscles in the membranes of the brain, as it becomes overheated; overflow of corpuscles and blockage. Thus: holistic, delocalized circumstances more than an individual cause (overheating is the sole starting point)
Thessalus (first century BCE)	Inflammation of the heart	Denial of antecedent causes
Celsus (first century BCE-CE)	Body as a whole; non-specific fever	
Galen (second-third century CE)	Brain, nerves, <i>hēgemonikon</i> (diaphragm via sympathy; lungs may be involved)	Inflammation of the brain Overflow of yellow bile in brain or meninges Accumulation of malignant humour Summer heat Bad lifestyle Also overflow of blood in the brain caused by various factors
<i>Anonymus Parisinus</i>	Doxographic survey: Head Meninx Brain Diaphragm Diaphragm Heart Head <i>Neura</i> Brain	Inflammation, affection of the various parts; descriptive rather than scientific
Aretaeus (first-second century CE)		
Oreibasius (fourth century CE) Aetius of Amida (sixth century CE)	Meninges, brain; some relation to the chest	

(cont.)

	Bodily localization	Cause
Paul of Aegina [ps.] Alexander of Aphrodisias (second- third century CE) Alexander of Tralles (sixth century CE)	Meninges and brain Brain Brain/meninges; but controversial localization	Ochre bile; yellow bile; overcooked yellow bile
Nemesius of Emesa (fourth century CE) Caelius Aurelianus (fifth century CE?) Byzantine authors Ḥunayn (ninth century CE) al-Rāzī (ninth–tenth centuries CE) Haly Abbas, <i>Pantegni/ Viaticum</i>	Brain No fixed localization Brain (diaphragm) Brain and meninges Diaphragm Brain Membranes of the brain or the brain matter Diaphragm	Inflammation, humoral imbalance
Ibn Sīnā (Avicenna), (tenth–eleventh century)	Brain/meninges (Diaphragm)	Hot complexion of the brain or <i>apostema</i> in the membranes of the brain or in the brain
Arnau de Vilanova (fourteenth century) Gilbertus Anglicus (thirteenth century)	Membranes/Brain (Diaphragm, chest) Anterior portion of the brain or its membranes (= <i>frenes</i> )	Hot <i>apostema</i> /abscess of the head Blood, pure yellow bile, pure red bile, or bile burnt black Hot <i>apostema</i> of the membranes Inflamed <i>apostema</i> born in the anterior portion of the brain or its membranes; accumulation of liquid in the brain due to (1) its many vessels, (2) its sponginess, which sucks in moisture
Gentile da Foligno (fourteenth century) Ibn Zuhr (Avenzoar) (twelfth century), <i>Taʿyisir</i>	Brain (Diaphragm) Head Brain, membranes	Apostema Humours
Bernard de Gordon (beginning of the fourteenth century)	Brain or membranes of the brain	Humours rising from the stomach Hot <i>apostema</i> Overheating

(cont.)

	Bodily localization	Cause
Talmud ( <i>Kordiakos/Qordiakos</i> )	Heart?	New wine A daemon
Rabbi Jonah (tenth–eleventh centuries CE)	Brain/mind/diaphragm	
Maimonides (twelfth century CE)	Brain/mind/diaphragm	
<i>Syriac Book of Medicines</i> (fourth–twelfth centuries?)	Brain/chest/diaphragm/membranes	
Salernitan school (tenth century CE–)	Brain/head/membranes (Diaphragm)	
Paracelsus (fifteenth–sixteenth century)	The <i>spiritus</i>	<i>Apostema calidus</i> The <i>tartari</i> can be cause
Antonio Beniveni (sixteenth century)	Head, brain	
André du Laurens (sixteenth–seventeenth centuries)	Brain and membranes of the brain	
Daniel Sennert (seventeenth century)	Diaphragm	
Giovanbattista Morgagni (seventeenth–eighteenth centuries)	Brain, meninges	
Herman Boerhaave (seventeenth–eighteenth centuries)	Brain and membranes of the brain (lungs can be involved)	Inflammation, heating; various circumstances
Gerard van Swieten (eighteenth century)	Brain and membranes of the brain (lungs and other organs may also be involved)	
Ferdinand Saalman (eighteenth–nineteenth centuries)	Brain and membranes of the brain (lungs and other organs may also be involved)	
Philippe Pinel (nineteenth century)	Brain and membranes of the brain	Contagious infection, lack of hygiene and cleanness, bad air
Physicians and veterinaries (seventeenth–nineteenth centuries)	Brain and membranes of the brain	Inflammation, heating
nineteenth–twentieth-century medical consensus	Brain and membranes of the brain (meningo-encephalitis)	Inflammation, heating; various circumstances