



BĀD I. IN PERSO-ISLAMIC MEDICINE

BĀD (wind) in Perso-Islamic medicine:

1. wind as a medically relevant environmental factor;
2. “airiness” as internal physiological and pathological agent.

1. Following Hippocrates’ “On airs, waters, places,” Galen stressed the influence on human health of wind as of other ecological and climatic factors; the winds prevailing in a given locality were held to affect the temperament of its population, and more specifically, to transmit those miasmatic diseases thought to be caused by corrupted air or vapors. Each wind had certain characteristics ascribed to it, depending on changes of season or time of day, and some were considered more salubrious than others. In Arabic and Persian medical literature, wind as an external force acting on the organism was treated together with air in the discussion of the six non-naturals (*setta żarūrīya*).

2. In Galenic medicine, air entered the lungs through respiration and was there and in the left ventricle of the heart assimilated to the body as vital spirit (*pneuma zōtikon*, mistranslated into Arabic as *rūḥ ḥayawānī*), which arterial blood then carried throughout the body. For Galen this *pneuma* was not a substance, but a certain quality of the inhaled air, yet he also used the term *pneuma* to denote pathologically altered matter which, because of its mobility,



sudden formation, and dissolution within the body, could not be understood as fluid or solid. According to this concept, *pneuma* in Galenic medicine did not only include flatulence in the gastrointestinal tract and its symptoms, such as eructation or colic-like aches, but was taken to act, in a variety of ways, on bone and muscle tissues as well as on organs like the brain, eyes, ears, spleen, and uterus. Manifestations of excess wind included disorders as diverse as epilepsy, pannus trachomatous, earaches, splenomegaly, tympanitic dropsy, uterine swelling, and spontaneous abortion during the first three months of pregnancy, “phlegmatic tumors,” bone fractures and spinal tuberculosis(?); male impotence without an apparent deficiency of semen production was, conversely, thought to derive from a lack of “wind” and was to be treated by ingesting flatulence-inducing foods such as beans. In the Greek authors down to Paul of Aegina, there is no terminological differentiation between *pneuma* as a force of life and *pneuma* as a gaseous substance analogous to fluids and solids on the one hand and to the four humors on the other; often, *pneuma* is the product of disordered humors like phlegm and black bile. In the Arabic versions of the Greek texts, and consequently also in Persian medical literature, the ambivalence of *pneuma* no longer obtains; *pneuma* as a force of life is rendered as *rūḥ* (spirit), whereas airiness as a material component of the body becomes *rīḥ* or *bād* (wind); following Galen, it is often qualified as coarse (*ḡalīẓa*) when discussed as an agent of internal disorder. Wind, although frequently mentioned as a cause of disease different from the four humors and not just as the result of their pathological alteration, was never really incorporated into the system of humoral pathology. Ebn Sīnā (Avicenna) apparently was the first to list internal wind under a separate heading in his discussion of pain according to its causes, and Esmā’īl Jorjānī then adopted this classification. The exact place of wind in Arabic and Persian medical writing remains to be examined, however, in particular as regards the possible influence of popular notions on the development of Islamic Galenic concepts of wind. As early as in Ebn Māsawayh’s treatise on ophthalmology, *Daḡal al-‘ayn*, pannus trachomatous was called *rīḥ al-sabal*, and the Persian term *bād-e bakast* (fly-wind) appeared there as the current name of a symptom which the author related to night blindness. In a later non-specialist usage, *bād* reflects several vague notions about disease, not all of them necessarily derived from Galenic medicine either; a sudden onslaught of pain is implied in some (*Farhang-e fārsī* I, pp. 435-36 and ‘A. A. Nafīsī Nāẓem-al-Aṭebbā’, *Farhang-e Nafīsī* I, Tehran, 1355 Š./1976, pp. 498, 502, 503, s. vv. *bād*, *bād-e sorḳ* [erysipelas], *bād-e gonjī* [colic], *bād-e fatq* [hernia], etc.).



BIBLIOGRAPHY

The following list of references gives an easily expandable selection of sources and studies which can serve to illustrate the discussion of the topic in Islamic medicine.

(A) Sezgin, *GAS* III, pp. 36f., no. 8 (Hippocrates, *Ketāb al-ahwīa wa'l-azmena wa'l-mīāh wa'l-boldān*), 123f., no. 81 (Galen's commentary on Hippocrates' *De aeribus*). M. Ullmann, *Die Medizin im Islam*, HO 6, Leiden and Cologne, 1970, pp. 27f., no. 3 (Hippocrates), 61, no. 10 (Galen's commentary). 'Alī b. Sahl Ṭabarī, *Ferdaws al-ḥekma*, ed. M. L. Siddiqi, Berlin, 1928, pp. 23-27, 501. Pseudo-Ṭābet b. Qorra, *Daḳīra fī 'elm al-ṭebb*, ed. G. Sobhy, Cairo, 1928, pp. 167-69. 'Alī b. 'Abbās Majūsī, *Ketāb al-malakī (Kāmel al-ṣenā'a al-ṭebbīya)*, 2 vols., Būlāq, 1294/1887, I, pp. 154-70, esp. pp. 163f. Abū Bakr Rabī' b. Aḥmad Aḳawaynī, *Hedāyat al-mota'allemin*, ed. J. Matīnī, Mašhad, 1344 Š./1965, pp. 143-54. Ebn Sīnā, *Ketāb al-qānūn fī'l-ṭebb, ketāb 1, fann 2, ta'līm 2, jomla 1, foṣūl 2-10*, esp. 9-10 (= 1.2.2.1.2-10; New Delhi, 1982, I, pp. 140-55, esp. pp. 152-55). Zayn-al-Dīn Abū Ebrāhīm Esmā'īl Jorjānī, *Daḳīra-ye ḳvarazmšāhī*, ed. J. Moṣṭafawī, III, Tehran, 1352 Š./1973, pp. 9-26. Ullmann, op. cit., pp. 244f.

(B) Claudius Galenus, *Opera omnia*, ed. C. G. Kuhn, 20 vols., Leipzig, 1921-33 (repr. Hildesheim, 1966), VII, pp. 596f., 599 *tremore*), X, p. 879 (*De methodo medendi*), XI, p. 111 (*Ad Glauconem*), XVII, 2, p. 847 (*In Hippocratis Aphorismos*), XX (Index), s.vv. *flatulentia and spiritus*. Alexander Trallianus, ed. and German tr. Theodor Puschmann as *Alexander von Tralles, Original-Text und Übersetzung. . .*, 2 vols., Vienna, 1878-79, esp. II, pp. 31 (eyeaches caused by *pneuma* obstructing pores), 439 (dropsy). Paulus Aegineta (Ar. Fūlos al-Ajānīṭī, ed. I. L. Heiberg, 2 vols., Leipzig and Berlin, 1921-24 (*Corpus medicorum graecorum* IX, 1-2), esp. I, pp. 171 (bk. 3, chap. 22, on *pneuma*-caused eyeaches), 268 (bk. 3, chap. 57, on priapism), 287 (bk. 3, chap. 70, on uterine flatulence), 291ff. (bk. 3, chap. 74, on female sterility), 350 (bk. 4, chap. 28, on airy swellings: *emphusēmata*). Abū Zakarīyā' Yūḥannā b. Māsawayh, *Daḡal al-'ayn* (see C. Prüfer and M. Meyerhof, "Die Augenheilkunde des Jūḥannā b. Māsawaih," *Der Islam* 6, 1916, pp. 217-56, esp. pp. 236, 240f., 243f. [pannus,



bād-e baḡast]). ‘Alī b. Sahl, op. cit., p. 162.11ff. (pannus), 220f. (dropsy), 273ff. (uterine wind), 325 (swellings). Pseudo-Ṭābet b. Qorra, op. cit., pp. 28.11-15 (*rīāḡ al-afresa*: spinal tuberculosis?), 94.7-10, 96.8-11, 98.3f. (hepatic and splenic disorders). Majūsī, op. cit., p. 386.2-7 (uterine wind). Aḡawaynī, op. cit., pp. 227.12ff. (headache), 229.10ff. (splitting headache), 247-50 (melancholy, etc., epilepsy), 356.4, 359.11, 381ff., 385f. (stomachic disorders, e.g., eructation), 403.3, 424f., 430f. (intestinal colic etc.), 451, 458f. (dropsy), 472f., 475f. (splenic disorders), 509.14-18 (male impotence), 517 (uterine winds), 540 (hysteria), 547 (spontaneous abortion), 577f. (*rīāḡ al-afresa*), 598 (itching rash). Abū Manṡūr Mowaffaḡ Heravī, *Ketāb al-abnīa ‘an ḡaḡā’eq al-adwīa*, ed. A. Bahmanyār and Ḥ. Maḡbūbī Ardakānī, Tehran, 1346 Š./1967, pp. 60.8 (ear-wind), 66.9ff. (headache caused by coarse winds), 91.4f. (wind increasing sexual drive), 95.10f. (uterine flatulence), 101.5f. (hemorrhoidal winds), 147.6f. (head-wind), 149.14-17 (wind as general agent of internal disorder), 158.5f. (uterine winds), 164.12f. (flatulence increasing semen and milk), 171.5f. (winds in chest), 245 n. 2 (infantile epilepsy called *rīḡ al-ṡebyān*), 337.6f. (pannus trachomatosus), and index, s. vv. *bād*, *naḡk*. Ebn Sīnā, op. cit., 1.2.2.2.16 (lesions of tissues), *ibid.*, 26 (specificity of pains caused by winds), 1.2.3.9 (symptoms of winds; see New Delhi ed. I, pp. 177, 182, 197f.; quoted in Jorjānī, op. cit., II, Tehran, 1349 Š./1970, pp. 70f., 231, 238). Rudolph E. Siegel, *Galen’s System of Physiology and Medicine*, Basel and New York, 1968, esp. p. 183 etc. and index, s.v. *Pneuma*.

Search terms:

□□□ bad baad