



BLOODLETTING

BLOODLETTING (Ar.-Pers. *hejāmat, faṣd*; Pers. *ragzanī, kūn gereftan*), a common medical treatment throughout Iranian history, though applied only in exceptional circumstances by modern medical practitioners. According to ancient medical theory, probably of Greek origin but adopted by the ancient Iranians and later by Muslims, blood was produced in the veins. The latter, beside carrying the natural spirit, also transported food after processing by the bowels; ideally this food was converted into blood by internal heat and re-converted into food by the body as required. Black bile was an integral constituent of blood. If heat was excessive, however, phlegm was produced instead of blood. All the humors were thus contained in the veins. A physician treating a patient suffering from a “hot” disease would therefore seek to remove heat with the blood; the “hotter” the disease, the greater the quantity of blood had to be removed. (For a more detailed discussion of these concepts see Elgood, 1951, and Niebyl.)

Applications. Throughout Iranian history bleeding was a common remedy; indeed, many Iranians above the age of fourteen had themselves bled at least once a year (Elgood; Najmābādī, pp. 22-28, 400; Spuler, *Iran*, p. 267). More often than not, bloodletting was undertaken without medical advice, simply because a person felt unwell or thought too much blood had accumulated in his or her veins. E. J. Polak reported in the 19th century (II, p. 238) that the standard question asked of physicians was *kūn dāram?* “Do I have [too much] blood?”

As for medical diagnosis, the nature of the disease and the location of the vein



(see below) had, of course, to be considered, but the time (season, day of the week, phase of the moon) that the procedure was to be performed was equally important. Each organ of the body was believed to be connected with one of the constellations of the zodiac. To let blood from an organ when the associated constellation was in the ascendant was considered perilous. Only after an astrologer had determined the auspicious day and hour could bleeding take place. Thursday afternoons were particularly auspicious (Elgood, 1951). Furthermore, most Iranians had themselves bled at Nowrūz, in order to rejuvenate their blood; at that time blood literally flowed in the bathhouses, where clients sought out the *dallāks* (barbers) after they had bathed. Often the procedure was repeated at the beginning of autumn. Some people were even bled once a month. For patients suffering from apoplexy or typhoid bleeding was not considered a proper procedure, but in instances of typhoid fever and diphtheria it was a must. Women were not to be bled during the first three months of pregnancy, but after that they could indulge in it, especially during the final month. After bleeding all patients were supposed to refrain from eating radishes for at least a week, whereas eggs, milk, and other fortifying foods were recommended (Polak, II, pp. 237-38; Schlimmer, p. 40).

Procedures. Bleeding was performed by means of three techniques: phlebotomy or venesection (*rag zadan*, *faṣd kardan*), cupping (*ḥejāmat kardan*), and leeching (*zālū andāktan*). In pre-Islamic Iran the recognized medical practitioners were artisans called “healers with the knife.” Later physicians practiced phlebotomy, which required a degree of medical knowledge (anatomy, pathology), and scorned the other techniques. Medical textbooks usually contained a chapter on phlebotomy, and many works on anatomy provided detailed information, including diagrams of the precise location of the veins. The last point was important, because the correct vein had to be chosen for optimal impact on the diagnosed disease; furthermore, some veins were not bled at all. Cyril Elgood (1951, p. 300) has discussed the main medical indicators for phlebotomy. The medical textbooks urged practitioners to abstain from menial tasks, in order to keep their hands nimble and sensitive, and recommended the use of antimony to improve their eyesight. The lancet (*neštār*) was to be held between the thumb and middle finger while the index finger palpated the vessel. In practice, however, barbers (*dallāks*) were the main practitioners of phlebotomy, and they were generally ignorant of these rules. In the 17th century Thevenot (p. 88), who wrote from personal experience, considered them “very dextrous at it; they tye a ligature of leather very straight about the Arm, and then without rubbing or looking



much at the place, they take their Lance, which is very broad and in a handle like a Razor, and prick very skilfully, byt they drew a great quantity of blood when they are let alone.” His view was confirmed by Jean Chardin (V, p. 179), who added that after the bloodletting, which took place outdoors in the street, the barber would release the tourniquet, apply some cotton to the wound, and bind it with a kerchief provided by the patient. The price was two sous (almost one *šāhī*).

Cupping (*ḥejāmat*) was often used when phlebotomy was contraindicated; it was supposed to remove the thinner part of the blood (plasma), rather than the more viscous part (serum). Cupping was of two types: wet and dry. In wet cupping the skin was scratched until blood flowed, and then the cup, which was a cow’s or sheep’s horn (*šāk-e ḥejāmat*) or a similarly shaped glass (*šīša-ye ḥejāmat*), was applied. This cup had a soft rim and a hole pierced in the point; an attached piece of leather made it possible for the cupper (*ḥejāmačī*) to close the hole after removing the cup. Depending on the prescribed treatment, one to three horns might be filled in a session. The most popular location for this kind of cupping was between the shoulders (*ḥejāmatgāh*), and most Persians bore the marks of it, which looked like welts from the lash. In the 13th/19th century, according to Polak (II, pp. 239-40), the main technique used was dry cupping (*ḥejāmat-e bādī* or *kūza*; for a picture of dry cupping by a nomad female barber around 1920, see *National Geographic* 39, 1921, p. 462), in which the cup was applied to the unbroken skin (*bādkeš kardan*). Paste was spread on the infected part of the body, and a burning candle or piece of cotton was used to set fire to it; a jar (*kūza*) with a mouth three to four inches in diameter was then placed over the area. The resulting vacuum caused the skin under the jar to swell and burst. (The same effect could be obtained with a mustard plaster.)

The third technique was leeching (*zālū andāktan*), in which worms were allowed to suck the blood. The leeches (*zālū*) came mainly from the Caspian area, around Lake Urmia, and Shiraz. In the mid-1850s the export trade in leeches was a government monopoly, which was farmed out for periods of ten years. Two French trading companies had agents in Rašt, Ardabīl, and Urmia, where they selected the leeches according to size and weight; they were put in chests filled with damp soil and exported to France. Already at that time, however, the trade in Iranian leeches was suffering from competition by other foreign suppliers, and the monopoly probably did not survive the 1850s (Blau, p. 76), for nothing further was reported about it. Later observers noted that



leeches were sold in Iran by itinerant peddlers (*zālū-forūš*), who cried their wares in the street. Because of high demand and low prices, they never cried in vain. According to Elgood (1951, p. 301) the leech considered most suitable was of the “color of duckweed.” The leech was applied to the diseased spot or near it (for example, in treatment of eye sores it was placed on the temples) and left to drink its fill; it then dropped off the patient (for a picture of leeching, see Šahrī, p. 145). Leeching was so popular as a remedy that “a peasant from Yazdeķvāst walked 180 miles and back to obtain some leeches for a rich and prominent citizen of his town, who was desperately ill but who most probably did not need leeches at all” (*National Geographic* 39, 1921, p. 465). Leeching was still practiced in Iran in the 1350s Š./1970s (Najmī, p. 103; for bleeding in modern Europe, see Kuppe).

Consequences. Bleeding was a risky affair. As a result of it, there was a very high incidence of anemia (*qellat-e dam*) among the Iranian population, higher than in most other countries, according to Schlimmer (pp. 495-96). It was also a primary cause of irregular menstruation. The instruments used were unhygienic, and, as the operation often took place in the street, the wounds were thus often infected; they usually healed by suppuration. Indeed, bleeding was sometimes the immediate cause of death, either through infection or because the barber had mistakenly opened an artery instead of a vein. The Mongol ruler Holāgū (Hülegü) Khan (654-63/1256-65), for example, almost died as the result of such a mistake. The ‘Abbasid caliphs also regularly submitted to bleeding. Phlebotomy with a poisoned lancet was the means by which people were assassinated. In general, bleeding weakened the patient which was not helpful if he or she was really ill (Elgood, 1951; Spuler, *Iran*, p. 267).

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