

The Contribution of Albucasis (Abul-Qasim Zahravi) in Venesection

Arish M.K.SHERWANI*, Abdul Nasir ANSARI**, Humaira A.H. ANSARI***, Izhar Ahmed Jameel Ahmed ANSARI****

* M.D.,P.S.M, (Unani), Lecturer Department of Community Medicine, M.I.J.T.U.M.C.&H.A.R.K.Hospital Mumbai] BUMS, MISHIM Qatar, MIMA North America, MNSA Chennai-India.
e-mail; arish_Sherwani@yahoo.co.in

** M.D., Unani M.I.J.T.U.M.C.&H.A.R.K.Hospital Mumbai
e-mail: abdulnasir777@yahoo.co.in

*** M.D. scholar, Department of Community Medicine, M.I.J.T.U.M.C.&H.A.R.K.Hospital Mumbai
e-mail: drahumaira@rediffmail.com
drahumaira@hotmail.com

**** M.D. scholar, Department of Kulliyat, M.I.J.T.U.M.C.&H.A.R.K. Hospital Mumbai.

Summary

In this article, Venesection, major root of medical practice and the contribution of Albucasis in Venesection are stressed. Moreover, its historical development, procedure and its scientific evaluation are also pointed out.

Key Words; Venesection, Bloodletting, Phlebotomy, Unani.

Introduction

Venesection may be the oldest of surgical procedures. Hippocrates referred to it; already it was so familiar as to need no direction. Until modern times it was the most universal operation. Celsus seems to be the first to put it on a scientific footing. He advanced the teaching of it to the point that Venesection had indication even in the very young and the very old, in pregnancy, in other conditions in hitherto deemed outside its scope. Phlebotomy thus became, and remained through Romans, Arabs and Medieval European medicine, the universal remedy. Paulus most likely inspired Albucasis; who excels all previous writers by numbering no fewer than 30 blood vessels as suitable for Venesection.

The practice of bloodletting has been used by almost all cultures and societies at some point in their medical history. The controversy over the usefulness of it has been ranging since the fifth century B.C. It was considered to be the part of treatment for practically every ailment that you can think of; asthma,

spitting blood, bruises, cough, consumption, contusion, convulsions, cramps, deafness, delirium, epilepsy, giddiness, gout whooping cough, hydrocephalus, headache, intoxication, lethargy, hysteria, lunacy, measles, palsy, rheumatism, sciatica, shortness of breath, and sore throat. It was also thought not as commonly, used as a punishment and as a form of worship to a superior power. It is believed in Graeco-Arab (Unani system of medicine) that hysteria gave rise to an accumulation of "putrid humors" which impaired the organs whose function was to purify the blood and caused this physical affliction. Bleeding and purging are the universal remedies for these humors and so they were employed for the treatment of hysteria as well. Such patient would be bled and then administered medicines that "fortified" the blood such as iron fillings. This practice continued in to the eighteenth century. It experienced a great vogue in the eighteenth and nineteenth centuries.

Venesection is often mentioned in connection with Anglo-Saxon leech craft. But the importance

seems to be placed on the timing of the operation rather than procedure it self. This is an example of a diagnosis given for paralysis: “scarify the neck after the setting of the sun, pour in silence the blood in to running water, after that spit three time, then say, “Have thou this unheal, and depart away with it”; go again on a clean way to the house, go either way in silence.”

Types of Bloodletting

There are three main ways of letting blood in Graeco-Arabic (Unani) system.

1. **Phlebotomy:** which is the direct cutting of a vein to release blood. It is often done with a knife and a spring-loaded knife.
2. **Cupping:** If the patient is too young, old, or weak to stand phlebotomy, cupping is advised. This was the act of applying a cup, in which a vacuum had been created through the use of fire, to either intact skin to cause it to fumify or to a place where small incisions had been made, to draw out blood.
3. **Leeching:** It was very popular in Arab physicians because it required little skill; one could do it oneself in the home and the leeches were ready to suck blood at any time. An adult would use between twenty and fifty leeches. They were also popular because they could be used in places that phlebotomy & cupping could not, be used, such as internal membranes. They were also often applied inside the nose, ear, eyes, mouth, anus, and vagina.

Sites of Venesection

The blood vessels in the body, which it is customary to open, are thirty-two in numbers. There are sixteen of them in the head, and there are two pulsating vessels behind the ear that are called the two occipitals; the two external arteries in the temples, and the two occipitals; the two external arteries in the temples; and two veins in the two internal angles of the eyes, called the vessels of sight; and the vein running up the middle of the forehead, and the vein situated at the tip of the nose; and the two jugular veins in the neck; and the two vein in the upper lip and two in

lower lip; being known as ‘the four vessels’, and two veins beneath the tongue. As for the veins that are bled in the arm and hand, they are five. One is the cephalic, which is on the outer side, popularly they called it the ‘head vein’ then there is the blue black, that is the median vein, which is made up of a branch from the basilic and a branch from the cephalic.

Procedures and Instruments of Venesection as described by Albucasis

Phlebotome (fa's): Literally a pick axe, this was used for piercing down ward according to Antyllus. Romans had popularly used it for body vein; then the basilic vein; this is the one situated on the inner side and is termed also the axillary vein but popularly it is called the ‘belly vein’; then the cord of the vein over radius, this is one that is clearly visible on the thumb. And the salvetella vein between little and ring finger, three veins in the leg and foot (sciatica, saphena and external saphena); two veins behind the ear that relief in chronic catarrh, migraine and chronic foul pustules, and scabs of the head.

Method

Patient's head should be shaved and the hinder part in the region of the two veins, should be strongly chafed with a rough cloths; then patient should bend his neck with his turban until the two veins are visible; there position is behind the ear in the two flattened places of the head; feel for them with your finger and when you feel there pulsation beneath your finger then mark the place with ink. Then take a knife-scalpel, known as Lancet and insert it beneath the vessels in to the skin until the scalpel reaches the bone; then lifting with your hand both vessels and skin make an incision dividing both skin and vein; the length of the incision should be about two finger side by side.

1. **Scalpel:** (Mibaza -the plain knife)
2. **Lancet:** (Al mibda ‘al nashl- a cutting or transfixing knife).

Venesection, Cure for Several Diseases

1. Section of two arteries in the temples gives relief for chronic migraine; sever headache,

constant ophthalmic and the flow of acrid superfluities in to the eyes.

2. Venesection of the two lachrymal veins gives relief in the diseases of eyes such as granular conjunctiva, inflammation, pannus and the diseases of the face.
3. Nasal Venesection helps in acute fever, violent headache, and in diseases of face such as red postules that arise on the nose.
4. Jugular Venesection helps in tightness of breath and the early stage of elephantiasis, melancholic diseases like vitiligo, impetigo, malignant ulcers and cancrum oris.
5. Lip veins (four) and cephalic Venesection is effective for pustules on the mouth and rotting of the gums, malignant ulcers, fissures of the lips and malignant ulcers in the nose and round about.
6. Venesection of the two veins under the tongue effects in quinsy.
7. Basilic Venesection cures the disorders below the throat and neck, in the parts neighboring the chest and abdomen.

Bloodletting In Modern World

One of the controversies surrounding bloodletting was how much blood to let. One of the general thoughts on the amount of blood to let was to bleed the patient until syncope. Syncope is defined here in this 1848 medical dictionary; "complete and, commonly, sudden loss of sensation and motion, with considered diminution, or entire suspension of the pulsation of the heart and respiratory movements". In the current day, this condition is not very differently thought of than shock. This is why, as time moved on, bloodletting was practiced more and more by skilled surgeons who were thought to be better educated in how to bleed without death or permanent damage. In the early Middle Ages bloodletting was almost entirely done by barber-surgeons. But once again as time moved on, this practice became more and more the domain of skilled surgeons, especially during the aforementioned vogue of the eighteen and nineteenth centuries. The use of bloodletting declined as better

cures were found for the problems it treated. Some aspects of bloodletting still exist today. Leeches are used in limb re-attachment and re-constructive surgery to keep a steady flow of blood through the tissue, and it has been said that a man should give blood once a year to lower the risk of a heart attack.

The word "phlebotomy", is now, in the modern day, defined as the practice of removing or "letting" blood for diagnostic, rather than therapeutic reasons. This is now the only form of medical bloodletting that is generally practiced. Phlebotomy is done with a syringe. The piston-and-cylinder was first used on wounds to extract pus. The invention of this device is attributed to the son of a barber in Alexandria, Egypt around 280 B.C. The use of an evacuated blood collection system became popular in 1943 with the marketing of the VACUTAINER BRAND SYSTEM.

Conclusion

Clinical Research Trial of Venesection is needed in chronic diseases of iceberg, which are incurable by modern methods of treatment and their sequelae also ends in chronic debilitating and crippling, disabilities.

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