



The Concept of Liver Disease Diagnosis in Avicenna's Canon of Medicine

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Dear Editor-in-Chief

Physicians in ancient Persia played an important role in development of medicine in the medieval Europe. One of the most influential figures of this era was Avicenna. Avicenna (980 -1037AD) was , a great Islamic and Iranian physician and the author of more than 335 books on medicine, philosophy and other branches of knowledge, and his masterpiece," The Canon of Medicine "which was the text book of medicine for more than 6 centuries in Europe and the Persian empire. The purpose of this study is to present the view point of Avicenna about reasoning for liver's condition (1). The structure of Iranian Traditional Medicine is based on some principles such as the fact that heart, brain and liver are the main organs of our body i.e. the human survival depends on their existence (2).

Liver is the origin of natural qova (Natural power). The most important function of liver is to produce humours (akhlat) for nourishing, growing and developing of body (3). Liver is the organ composed of flesh, vessels, and a sensitive membrane. Of course the very liver does not have sense itself, its color is like the color of frozen blood (4).

Liver is the origin of the body's vessels. Masarigha vessels (mesenteric Vessels) and the

branches of the Bab's vein are originated from the concave part of the liver .These two vessels go towards stomach and intestine to absorb chylus (5), that is, product of gastric digestion or the first digestion, from them and then deliver it to liver for the second stage of digestion or hepatic digestion, to produce Humours (6). There is relation between balancing of these Humours and different diseases such as hypercholesterolemi (7). Vena cava vein is originated from its convex part in order to deliver food to all organs and take the urine, made of the waste created from the second stage of digestion, to the kidneys (4).

According to the above mentioned points, quoted from Iranian Traditional Medicine literatures knowing liver, diagnosis and treatment of its diseases take an important role.

But Avicenna without any facilities for diagnosis of liver diseases introduced some criteria in order to reasoning for the liver's condition. In that era the emphasis was more on history and physical exam of the liver to reason for its condition. Our study shows that there are 10 criteria of reasoning for the liver's condition as follows:

- 1) The reason based on palpation of the liver's location:

- i. If the place were warm or cold, dry or wet we can conclude about the liver's temperament (2,8).
- ii. If the place were stiff or tumescent, it implies the stiffness or stiff swelling or tympani of the liver.
 - 2) The reason based on liver ache:
Different kinds of liver ache illustrate different diseases of liver such as obstruction, swelling, tympani etc (9, 10).
 - 3) The reason based on liver function:
Such as absorption, digestion, repulse blood or dam towards body, urine towards kidneys, yellow bile or safra towards gallbladder and black bile or sauda towards spleen
 - 4) The reason based on shared organs with liver:
Such as stomach, spleen, lungs, heart, tongue etc.
 - 5) The reason based on the whole condition of the body:
Such as the color of skin, fatness or thinning and high temperature of the whole body
 - 6) The reason based on the hair grown on the skin of liver area
 - 7) The reason based on the vessels originated from liver
 - 8) The reason based on the composition of other organs:
Such as all vessels or finger and their length or shortness
 - 9) The reason based on the Humours created in liver
 - 10) The reason based on the agreeable and opposed of liver

References

1. Najm Abadi M (1976). *History of Medicine in Iran*. 1st ed. Tehran University Publication, Tehran, pp.: 673-685.
2. IbnSina AAH(2005). *Al-Qanun fi al-Tibb*. Alamy Le- Al-Matbooat institute, Lebanon, 1, pp.: 28-117.
<http://www.elib.hbi.ir/persian/TRADITIONAL-MEDICINE/CANON-WEB/CANON-WEB.htm>
3. IbnSina AAH(2005). *Al-Qanun fi al-Tibb*. Alamy Le- Al-Matbooat institute, Lebanon, 1, pp.: 30, 41, 48.
http://www.elib.hbi.ir/persian/Tr_dr_eshahkarami@yahoo.com RADIATIONAL-MEDICINE/CANON-WEB/CANON-WEB.htm
4. IbnSina AAH(2005). *Al-Qanun fi al-Tibb*. Alamy Le- Al-Matbooat institute, Lebanon, 3, pp.: 125-127.
<http://www.elib.hbi.ir/persian/TRADITIONAL-MEDICINE/CANON-WEB/CANON-WEB.htm>
5. Sabzevari MP(2010). *Sharhe-Almanzumab*. Noor al-Hekmah institute, Qom, p.: 86.
6. Jorjani I(2006). *Al-Aghbraz al-Tibbva al-Mababes al-Alaieab*. Tehran University Publication, Tehran, 1, p.: 103.
7. Emtiazy M, Keshavarz M, Khodadoost M, Kamalinejad M, Gooshahgir S, Bajestani HS, et al(2012). Relation between Body Humors and Hypercholesterolemia: An Iranian Traditional Medicine Perspective Based on the Teaching of Avicenna. *Iranian Red Crescent Medical Journal*, 14(3): 133.
8. Ali SM, Islam R, Alam M(2007). A Scientific Co-relation between Blood Groups and Temperaments in Unani Medicine. *Indian Journal of Traditional Knowledge*, 6: 319-23.
9. IbnSina AAH(2005). *Al-Qanun fi al-Tibb*. Alamy Le- Al-Matbooat institute, Lebanon, 3, pp.: 128-9.
<http://www.elib.hbi.ir/persian/TRADITIONAL-MEDICINE/CANON-WEB/CANON-WEB.htm>
10. AzamKhan M(2004). *Aksir Azam*. The Institute for Medical History-Islamic and Complementary Medicine, Tehran University of Medical Sciences, Tehran, 2, pp.: 9-10.