Concept of Jaundice in Greco-Arab Medicine

Dear Editor-in-Chief

Unani Medicine (Greco-Arab Medicine) is one of the ancient system of medicine. A vast array of literature about liver diseases has been documented in Unani Medicine. Liver is an organ for origin of Quwaa (Natural power). Galen, (129-217 AD) even stated liver counterpart with sun, a source of energy for others planets. Liver is also an organ for production of humours (akhlat) for nourishment, growth and development of the body. Each of the four humours named dam (sanguine), balgam (phlegm), safra (yellow bile) and sauda (black bile), carries their own normal temperament. The derangement in quality and quantity of humours, leads to liver pathologies including jaundice. Jaundice has been stated to be caused by quantitative or / and qualitative changes in safra (yellow bile) or sauda (black bile). Jaundice (Yarqan) was discussed widely and deeply in Unani Medicine.

According to the concept of Unani Medicine, jaundice (yarqan) is discernible yellowish or blackish discoloration of skin and conjunctiva due to diffusion of yellow or black bile (safra or sauda respectively) in blood vessel toward skin with or without infection.

Hippocrates (460-377 BC), the father of medicine in ‘Jawamiul ilaj-e-wal- araz’ as quoted by Razes (850-925 AD) in ‘Kitabul Hawi,’ proclaimed sometimes jaundice is caused by Sue- Mizaj Har Jigar (Abnormal/Pathological Hot temperament) of blood vessel whereby sanguineous humour transmuted to bilious humour (yellow bile). Moreover in ‘Qanoncha Buqratiya’, he described jaundice as ‘discoloration of conjunctiva and skin associated with or without fever, is originated by sustained intake of contaminated or infected diet.

Galen, as quoted by Razes in ‘Al- Hawi’, outlined the following etiologies and types of jaundice,

• Insect bite and food contaminated with poisonous material generate toxemia (hemolysis). This leads to imbalance in yellow bile or bilirubin (safra) resulting jaundice.

• ‘Obstruction in liver’ (sudda-e-kabid), another etiology for genesis of jaundice - and he categorized it as ‘Obstructive Jaundice’ (Yaqan-e-suddi).

• Acute hepatitis (Warm-e-jigar haad)

• Pathological /Non-functioning Gall bladder

Along with these etiologies, Razes in ‘Al-Hawi’ archived other causes of jaundice from the reference of Ibn-e-maswah such as,
• Abnormality in functioning of liver, bile ducts and associated blood vessels
• ‘Bohran’ (a state of crisis and lysis in a disease)
• Obstruction within liver (biliary canaliculi)

Likewise Abu sahal Masih (quoted by Razies in ‘Al-Hawi’) proclaimed Pathological Hotness of temperament of liver or Gall bladder (Hararat-e-kabid & mirara respectively), a causative factor for jaundice. He also documented clinical features such as yellowish discoloration of skin, coated tongue, weight loss, constipation and abdominal discomfort.

Razes in his renowned book ‘Al-Hawi’ proposed that during jaundice evacuation of yellow bile/ bilirubin (safra) is obligatory. Furthermore, if physic (tabiyat-e-mudabbir-e-badan) fails to do so, infection proceeds in yellow bile which generates fever. However fever also appears in inflammatory condition of liver, also stated.3, 6

Rabban Tabri (810-895 AD) in ‘Firdaus-ul-hikmat’ (first original Arabic book in history) also documented mechanism of genesis of jaundice. He mentioned all the above etiologies and also that physic (tabiyat-e-mudabbir-e-badan) divert excessive bile from gall bladder toward skin for excretion through sweat. Resulting high concentration of yellow bile (safra) in subcutaneous tissue imparting discoloration and jaundice tinge. Furthermore he also claimed that black bile (sauda) is also responsible for jaundice.2

Avicenna (980-1037 AD), Great Persian Muslim scholar in his medical encyclopedia ‘The Canon’ and Azam khan in ‘Akseer-e-azam’ described jaundice as visible discoloration of body (yellowish or blackish) due to diffusion of yellow or black bile from blood toward skin with or without infective pathology. In case of infection, tertiary fever (humma-e-gib) and quartan fever (hummae-rub) develops in jaundice with yellow discoloration (yarqan safrawi) and blackish discoloration of body (yarqan saudawi) respectively.4, 5

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Authors Contribution

SA has collected analyzed, interpreted and drafted the data. MAS participated in sequence alignment and edited the words. AAK & SHAH reviewed the article. All authors read and approved the final manuscript.

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