CONCEPT OF GALL BLADDER AND CHRONIC CHOLECYSTITIS AND BILIARY LITHIASIS IN AYURVEDA

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ABSTRACT

Origin of Ayurveda takes place from Vedas. At that period maximum peoples are free from disease, but due course of time health was going to be decreases and manifestation of diseases are increase. Clinical finding and management of diseases has been explained by various author in their Ayurvedic text. Clinical finding of Chronic Cholecystitis and cholelithiasis can be correlated with Shakhasrita Kamala, Pittaja Udoor Shula and Pittodar. Treatment of the disease is the breakdown of pathology of disease. Ayurvedic way of complete pathogenesis of Chronic Cholecystitis and cholelithiasis, can be explained by Shatata-kriyakala. Here we will discuss about the anatomy of Gall bladder and pathology of Chronic Cholecystitis and cholelithiasis.

Keyword: Chronic Cholecystitis and cholelithiasis, Shakhasrita Kamala, Pittaja Udoor

INTRODUCTION

Chronic Cholecystitis and cholelithiasis is immerging one of the commonest general surgical problem in India as well as world. In Vedic & Samhita period clinical manifestations of Pittodara, Pittajudar Shool Sanipatodar, Yakrittdalyodar and Shakhasrita kamala are somewhat similar to the Chronic Cholecystitis and cholelithiasis. There were no tools to compare accurately so that it was not given a major importance and it was explained in short.Gallbladder is not clearly described in Ayurvedic text but classical Ayurvedic literature have got many references which probably indicates that gallbladder can be taken as "Kloma" in Ayurvedic classical text. The position of "Kloma" in Ayurvedic text may be correlated by different author as follow:

Dalhana in his commentary on Shrutha Samhita described Kloma as Tila like structure situated in the right side of the abdomen below the liver that can be consider as gallbladder.

In Adhmal commentary of Sharangdhar samhita, Anatomical and Physiological concept of kloma has been mentioned. According to him "Kloma" is situated near the liver and it is full of waste product of blood (Bile). He has also mentioned Tila for Kloma.

In Relation to development of Kloma Sharangdhar described that "Kloma" develops from the waste product of blood". Kashyap also described the position of Kloma which is just below the liver while describing various Kosthtang in Sharir Sthan of his Samhita. In Ashtanga Samgrah liver and Kloma have been described in right side, below to liver which also suggests the nomenclature of gallbladder. Thus we can conclude from the facts
presented above that the concept of Pittashaya is already laid in Ayurveda but morphologically it is described along with the liver. However, Kloma may be taken as gall bladder. In Ayurvedic Samhita gall bladder i.e. Kloma would have been considered along with the liver that is why no separate description is available. A better appreciation of the concept obtained by referring the liver spleen diseases i.e. "Yakrit pleeha roga". Particularally Shakhashrita Kamala may be correlated with extra hepatic biliary diseases, where some obstruction in the biliary tract has been considered as the primary cause of disease. Again no description of Ashmari and other diseases pertaining to Pittashaya or Pittakosh is available in the classical text.

**BILE IN AYURVEDIC TEXT:**

The Physical characteristics and qualities of Pitta described in the ancient Ayurvedic texts bear a striking resemblance to hepatic bile. The pigments of bile i.e. the bilirubin and biliverdin are essential constituents of hemoglobin complex. While in Ayurvedic references Pitta as the Vikriti or by product of Rakta (i.e. blood is equally significant as above). Bile is generally thought to be the modern analogue or representative of Pitta. It will be appreciated from the physiological description of Pitta, though there is much similarity between the two, yet Pitta is much wider term in Ayurveda. Pitta is Tridosha, it may be correlated with gastric juices. Intestinal juices with various enzymes helps in digestion i.e. Agni in Ayurveda, digest Anna as Annarasa and Kitta.

The phenomenon of Pitta comprehends a large group of bio-chemical substances as described in Ayurveda. Pitta have five types i.e. Pachak pitta helps in digestion, Ranjaka Pitta helps in haemopoesis, Alochaka Pitta helps in visual function. Emotions, angry and mental functions are depending on Sadhaka pitta. The colour of the skin depends on the Bhrajaka pitta. The reference by Vagabhatta explains that pitta is the byproduct of Rakta because of its intimate coexsistence with Rakta as well as its capacity to Vitiate Rakta. Moreover, Pitta seems to be homologous to Rakta due to similarity in color and odor both. Further both Rakta and Pitta have a common site in Pliha (Spleen) and Yakrit (Liver). The implication of this view that Pitta is mala (waste product) of Rakta. It can be summed up as follow in the light of known facts of today. We find support for this hypothesis from Prof Sherlock (1953). One of the renewed authorities on liver diseases is that bile pigment is the only waste product resulting from hemoglobin breakdown, with this references it may be concluded that Rakta is the seat of Pitta. The pigments are also the (waste product) Mala of the blood.

**HEPATOBILIARY DISEASES: IN AYURVEDIC TEXT:**

Sushuruta mentioned eight types of udar roga i.e. Vatodar, Pittodar, Kaphodar, Sannipatodar, Yakritpleehodar, Boddhagudodar, Parisravyodar and Dakodar. On the basis of clinical correlation Pittodar and Yakrit Pleehodar may be correlated with biliary disease. Sushuruta explains clinical feature of Pittodar as yellow color of abdomen, yellow color of eyes, urine, stool and nails which may be correlated with biliary disorders. While Yakritpleehodar correlate with Spleenomegaly and hepatomegaly. Which correlated that swelling in left side may be of Spleenomegaly and right side it may be of hepatomegaly. Other diseases like Pandu, Kamala and Shula described in Madhav Nidan may be clinically correlated with Hepato biliary disease, while describing Kamala; Charaka described two types of Kamala roga.
(i) **Shakhashrita Kamala** (Obstructive jaundice)
(ii) **Kosthashrita Kamala** (Hepato cellular jaundice)

In Ayurvedic texts **Charak** mentioned that Kamala develops as complication of Pandu with these things **Charak** explained **Samprapti** of Kamala. When the patient suffering from **Pandu roga** & taken a diet of Pitta aggravating so that aggravated Pitta burns the Rakta and Mamsa Dhatus causing the disease Kamala. In modern views dagdha process may be correlated with catabolic process. In rakta dagdha there is dearranged catabolic state of RBC i.e. hemolysis, which may be correlated with hemolytic Jaundice.

**SAMPRAPTI**

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**Pandu Roga** (Charaka) 
**Pitta predominant** 
**Person’s** (Vagbhatta) 
**Patients suffering from chronic diseases** (Sushruta) 

Intake of pitta Vardhak Ahara

Excessive aggravation/Vitiation of Pitta

Increased Vata & Kapha

Rakta Dagdha (Hemolysis) Mamsa Dagdha (Hepatocellular damage) damage)

Paratntra Kamala Swatantra Kamala

Koshthashrita Kamala (Hemolytic jaundice) Shashrakhashanta Kamala (Obstructive jaundice)

*Dagdha* is commented by Chakrapani as ‘Pradushya’ i.e. a patient of Pandu roga continues to use pitta vardhak Āhara and vihara, aggravated pitta vitiates Rakta and Mamsa Dhatu causing the disease Kamala.

Here needs mention rakta dagdha and maPsa dagdha.

**RAKTA DAGDHA :**

It can be correlated with the hemolysis of old RBC. It manifests as hemolytic jaundice. More over it also implies to the vari-
ous blood borne pathogens circulating in blood, known to cause jaundice e.g. viral infections, bacterial infections, circulating immune complexes. Since dagdha refers ‘pradushana of rakta dhatu’.

MAMSA DAGDHA:
Mañsa dhatu is refers to the supporting tissue of the body. At the tissue level, it is the cell membrane which maintains the shape and integrity of the organelle or the tissue proper. Therefore mamsa dagdha refers to injury to cell membrane of hepatic parenchymal cells.

During the process of biotransformation of dhatus, rasa is converted to rakta with the help of raktagni (along with bhutagnies), Pitta is produced as a byproduct. If there is any derangement at the level of Dhatwagni or Bhutagni, malarupa pitta is produced whose accumulation leads to the manifestation of kámala. This is in conformity with the formation of bilirubin from haem. Here mala refers to bilirubin in systemic circulation, urobilinogen in urine and ster-cobilinogen in stool.

SHATKRIYAKALA OF KAMALA:
SANCHAYAVASTHA: The normal breakdown process of rakta (RBC) is accelerated in raktavahasrotas and its moola. Yakrit (liver) and pliha (spleen) leads to the excess formation or the mala roopa pitta or bilirubin.

PRAKOPAVASTHA: When the liver and spleen is unable to eliminate the mala roopa pitta (bilirubin) it gets accumulated in liver and spleen.

PRASARAVASTHA: The accumulated unconjugated bilirubin in liver and spleen gets into circulation and spreads to various parts of the body.

STHANASANSRAYAVASTHA: An attempt is made by the liver to conjugate, the unconjugated bile which is by product of Rakta but due to reduced function of the liver unconjugated bile is regurgitated back into the circulation and mild icterus is seen in this stage.

VYKTAVASTHA: The concentration of mala roopa ranjaka pitta becomes very high in the circulating blood and produces yellow colouration of skin, conjuctiva, mucous membrane, urine and stool. In this stage Kamala is clearly established.

BHEDAVASTHA: Kamala developed by the above process either resolves or converts into Kumbh Kamala.

SAMPRAPTI GHATAKA:
Dosha : Pitta
Dushya : Rakta, Mamsa
AdhiDtana : Kostha / Sakha
Srotas :Rasavaha,Raktavaha, Annavaha, Purishavaha
Srotodusti : Atipravritti, Sanga, Vim Árgamana

POSSIBLE CORRELATIONS:
Koshtádritak Ámala : Haemolytic jaundice
KoòôhaðakháðritakÁmala: Hepatocellular jaundice with or without intrahepatic cholestasis
Íakhádrítak Ámala: Obstructive jaundice :Hepatocellular failure with PTH with ascites.
Halimaka: Chronic obstructive jaundice (Post Hepatic)
Pánaki: Hepato-renal syndrome

Pattic shula described in Madhav Nidan can be correlated with biliary cholic due to cholecystitis. In modern science colicky pain is due to obstruction in the lumen. In Ayurvedic view, according to siddhanigraha shula is due to Shrotawrodha i.e. obstruction in the channels.

CONCLUSION
Finally, we can say that Gall bladder is Kloam in Ayurvedic explanation. Different clinical manifestation of Chronic Cholecystitis and biliary lithiasis is explained in Ayurveda as variety under the
heading of different disease as like Shak-hasrita Kamala, Pittaja Udoor Shula and Pittodar. In recent era Ayurveda explain the management of these diseases collectively under heading of Yakratplihodar vikara. Use of the drugs explain under the heading of Yakratplihodar vikara are effective in case of Chronic Cholecystitis and biliary lithiasis.

So as per the famous quotation of Charak that there is no need of giving name of every disease, As per our knowledge we should understand them by their Samprapti. Some different manifestations of Chronic Cholecystitis and biliary lithiasis, it can be understand by pathogenesis (Shatakriyakala) as per above and treated by the drugs explained under Yakratplihodar vikara.

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