



Demographical Observation Of Shakhashrit Kamala (Hepato-Cellular Jaundice) During Upshayatmaka Study Of Navayasa Lauha Churna.

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ABSTRACT

All most signs and symptoms of jaundice are much more similar to kamala ailment of ayurveda in various aspects. The classification of kamala is based on its origin and pathology. It is two types; Koshthashrit and shakhashrit. Koshthashrita kamala arises due to excess break down of erythrocytes, it is also called bahupitta kamala because increase the production of pitta. Second shakhashrita kamala arises due to intrahepatic cholestasis, here the cause kamala is only reduced the excretion of bilirubin, so called alp-pitta kamala. Both types of jaundice are very much close to the haemolytic and hepato-cellular jaundice of modern medical science.

The persons taking wholesome food do not suffer from disease caused by the same because the use of wholesome food alone is not able to avert the fear of all diseases as there are other etiological factors even except the use of unwholesome food. In case of due to certain reasons such as unwholesome articles are not equally deranging nor have the dosas equal strength, all persons also are not equally capable to resist the disease (have no equal immunity). Because the resistant of body against disease makes with several elements like prakriti, sara, sanghanan, ahar shakti. abhyaranana shakti, vyayamshakti, vya, dehsa and kala etc.

Key words:- Shakhashrit kamala, Agni, Prakriti, Nadi, Ahar shakti, Kosht

INTRODUCTION:-

Nowadays well known, the most frequent cause of jaundice is viral hepatitis. In present century viral hepatitis is a great blazing problem to modern medical science due to its broad range of their etiology, clinical manifestations and thinning out capacity. It causes millions of death every year all over the world. According to WHO about 10-50 persons per 1000,000 are affected annually & in India 85-95 percent (on the basis of sero-epidemiological study) of children is infected by 10 years of age with Hepatitis A Virus. More than 2 billion people global have evidence of past or current HBV infection and 350 million are chronic carriers & approximate 620,000 deaths with HBV. In India there is 5-7 percent HBsAg carrier. According to evaluation of WHO, 3 percent of the world population is infected with HCV & approximate 170 million individuals are chronic carrier at risk of developing liver cirrhosis & liver cancer. But In India, the carrier's state of HCV is 2 percent.

In ayurveda, the beginning of diseases is depends upon various factors like *sara, sanhanana, satmya, satva, ahara shakti, and vyayama shakti*, prakriti, vihar shakti, agni bala, koshttha prakriti, appetite and nidan (etiology) age, sex etc. Therefore the demographical study should be done on the account of

above important factors. But here, in this study only some important factors are taken among described above at their appropriate places.

MATERIAL AND METHODS:

Selection of patients:-

On the basis of inclusion criteria, 32 patient of kamala were registered from O.P.D. & I.P.D. of National Institute of Ayurveda, Jaipur, Rajsthan, who were clinically found suitable for upshayatmak and demographical study.

Inclusion criteria:

1. All patients with clinical manifestation of kamala roga were selected.
2. Age of patient in between 10 to 70 years.
3. Either sex.

Exclusion criteria:

1. Jaundice patient with liver failure, ascites, kernicterus, post-hepatic obstruction, liver abscess, liver cirrhosis, & biliary cirrhosis.
2. Jaundice due to genetical and chromosomal disorders.
3. Less than 10 years and more than 70 years
4. Pregnant woman with jaundice.

Discontinuous criteria:-

1. A non cooperative patient.
2. Whose symptoms were aggravated?
3. Who developed hypersensitivity for any constituents of trial medicine?

Diagnostic and assessment criteria:-

Diagnosis and assessment of the effect of therapy was done on the following parameters:

- **Subjective parameters:-** Diagnosis and assessment for any improvement in various clinical features of kamala was done fortnight on the basis of grade scoring methods.

Symptoms rating scale for kamala:-

S. No.	Severity of symptoms	Score	Scoring symbol
1.	Absent	0	-
2.	Mild	1	+
3.	Moderate	2	++
4.	Severe	3	+++

- **Objective A(Laboratory) parameters**

- Haematological- TLC, DLC, ESR, Hb gm%, CT & BT
- Serological- S. bilirubin direct & indirect, ALT, AST, ALP, serum protein, lipid profile & HbsAg.
- Urine- Bilirubin and urobilinogen.
- Radiological- USG whole abdomen

Data documentation and statistical analysis:

It was a demographical and clinical study under single blind test and its all data were analyzed using appropriate statistical tests. All values of quantitative variables are expressed as percentage and calculated as percentage, mean, \pm SD, SE, "w" (Wilcoxon rank sum test) and t-test.

Demographical observation:-

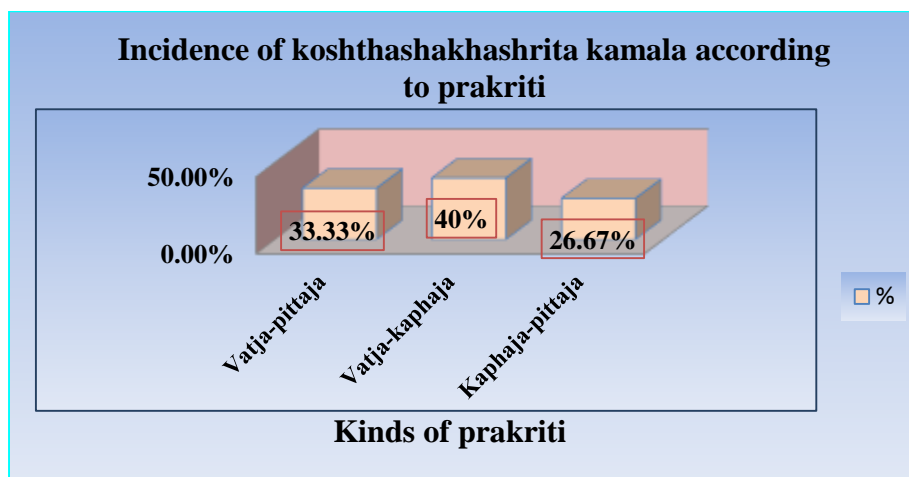
The contemporary clinical study was conducted at National Institute of Ayurveda jaipur, Rajsthan. After proper evaluation on the basis of clinical and laboratory investigations total 32 patients were registered from the O.P.D. / I.P.D. of National Institute of Ayurveda. Out of 32 patients, 2 patients could not complete their drug trial (due to increased symptoms). The study has been conducted only on 30 patients.

1) Incidence of *koshthashakhashrita* kamala according to prakriti

Table No.1:- Showing the incidence according to prakriti

S. No.	Sharirika Prakriti	No. of Pt's	Incidence of ailment (%)
1.	Vataja-pittja	10	33.333%
2.	Vataja-kaphaja	12	40%
3.	Kaphaja-pittaja	8	26.67%
Total		30	100%

In the present clinical trial maximum number of patients (40%) belonged to *vataja-kaphaja prakriti* and rest were *vataja-pittaja* (33.33%) and *kaphaja-pittaja* (26.67%) *prakriti* patients. This clinical study shows that *vataja-kaphaja prakriti*'s people could be more prone than other *prakritis*.



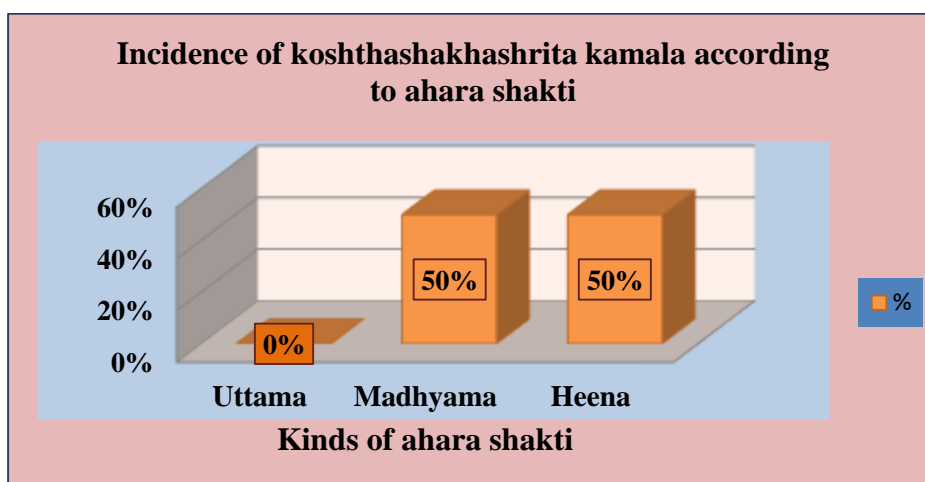
Graph No.1

2) Incidence of koshthashkhashrita kamala according to ahara shakti

Table No.2:- Showing the incidence according to ahara shakti:

S. No.	Ahara shakti	No. of Pt's	Incidence of ailment (%)
1.	Uttama	0	0%
2.	Madhyama	15	50%
3.	Heena	15	50%
Total		30	100%

The majority of kamala patients were having the madhyama (50%) & heena (50%) *ahara shakti* and there was no patient with *uttama ahara shakti*. These above data says that the patient of jaundice has poor appetite & digestion capacity.



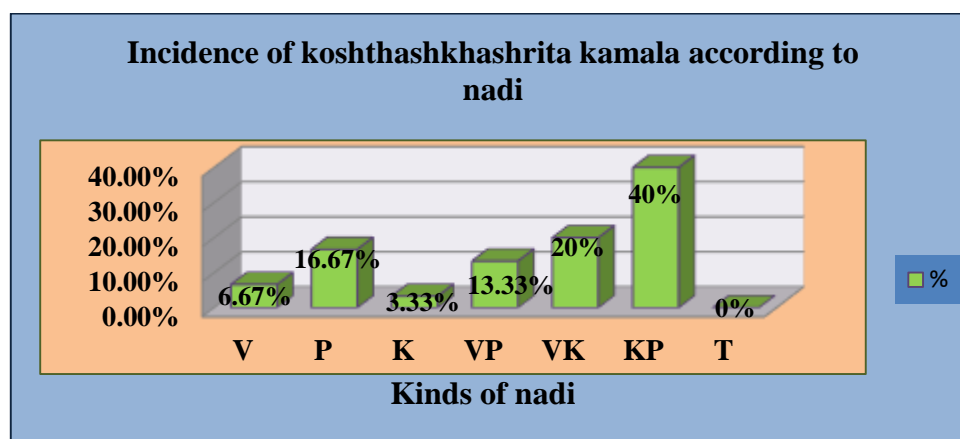
Graph No.2

3) Incidence of koshthashkhashrita kamala according to nadi pariksha:

Table No.3:- Showing the incidence according to nadi of patients

S. No.	Nadi	No. of Pt's	Incidence of ailment (%)
1.	V	2	6.67%
2.	P	5	16.67%
3.	K	1	3.33%
4.	VP	4	13.33%
5.	VK	6	20%
6.	KP	12	40%
7.	T	0	0
Total		30	100%

On the examination of nadi, there were found 6.67% patients of *vatika nadi*, 16.67% patients of *paittika nadi*, 3.33% of *kaphaja nadi*, 13.33% patients of *vatika-paittika nadi*, 20% patients of *vatika-kaphaja nadi*, 40% patients of *kaphaja-paittika nadi* & no patients were found of *tridoshaja nadi*.



Graph No.3

4) Incidence of koshthashkhashrita kamala according to appetite

Table No.4:- Showing the incidence according to appetite

S. No.	Types of appetite	No. of Pt's	Incidence of ailment (%)
1.	Poor	18	60%
2.	Moderate	11	36.67%
3.	Good	1	3.33%
4.	Excessive	0	0%
Total		30	100%

According to appetite, 60% of kamala patients had poor appetite, 36.67% moderate appetite and remaining 3.33% had good appetite while there was not found any patient of excessive appetite.

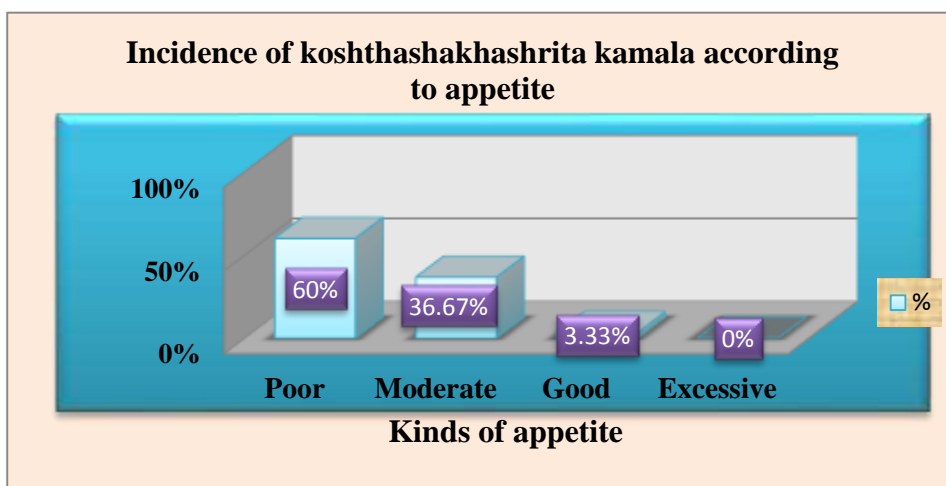


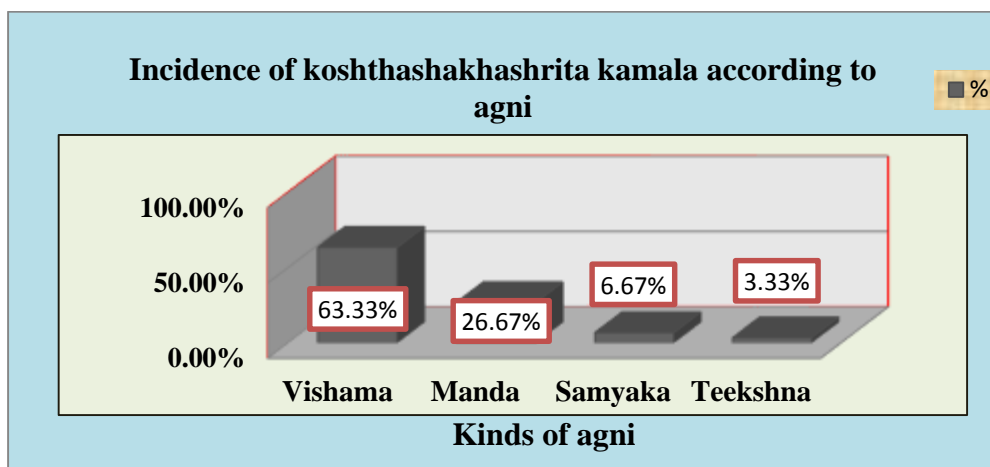
Figure no.4

5) Incidence of koshthashakhashrita kamala according to agni:

Table No.5:- Showing the incidence according to agni

S. No.	Kinds of agni	No. of Pt's	Incidence of ailment (%)
1.	Vishama	19	63.33%
2.	Manda	8	26.67%
3.	Samyaka	2	6.67%
4.	Tikshna	1	3.33%
	Total	30	100%

From above data it is obvious that 63.33% patients of kamala had *vishamagni*, 26.67% *mandagni*, 6.67% *samyakgni* & 3.33% *tikshnagni*. The maximum incidence in *vishamagi* and *mandagni* patients gives the textual support.



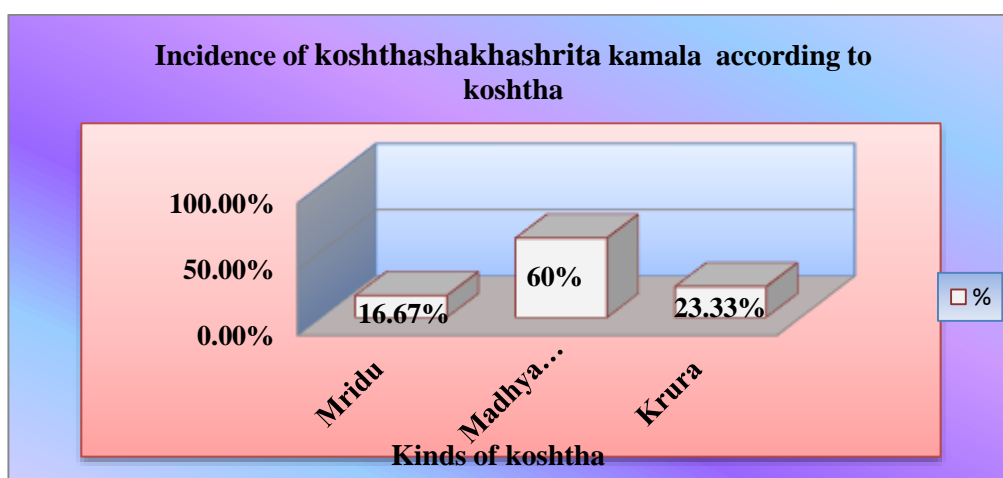
Grapha No.5

6) Incidence of *koshthashakhashrita* kamala according to koshtha

Table No.6:- Showing the incidence according to koshtha

S. No.	Koshtha	No. of Pt's	Incidence of ailment (%)
1.	Mridu	5	16.67
2.	Madhyama	18	60%
3.	Krura	7	23.33
Total		30	100%

Occurrence of koshtashkhashrita kamala according to kinds of *koshtha*, there was maximum of *madhyama koshtha* (60%) and followed by *krura koshtha* (23.33%) and *mridu koshtha* (16.67%).

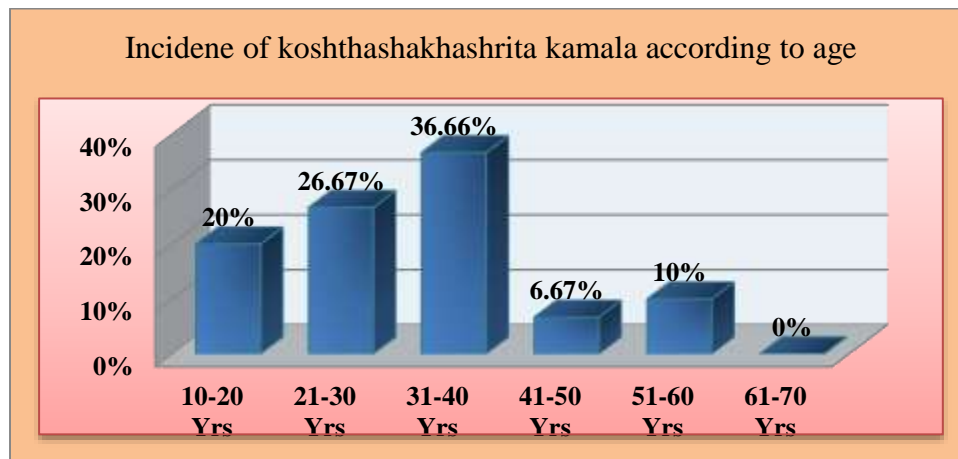
**Graph No.6**

7) Incidence of *koshtashkhashrita kamala* according to age

Table No.7:- Representing the incidence according to age of patients

S.No.	Age of pt's	No. of Pt's	Incidence of ailment (%)
	10-20	6	20 %
2.	21-30	8	26.67 %
3.	31-40	11	36.66 %
4.	41-50	2	6.67 %
5.	51-60	3	10 %
6.	61-70	0	0 %
Total		30	100 %

According to age maximum number of patients were found in age group of 31-40 years then 21-30 years, 10-20 years, 51-60 years, 41-50 years & 61-70 years respectively.



Graph No.7

RESULTS AND DISCUSSION:

Table No.1- Maximum No. of patients 12 (40%) were found of *vataja-kaphaja prakriti*. As well known and also explained above, everybody take the nature of diet just reverse to their *prakriti*ⁱ. In *shakhashrita kamala pittavaha srotas* obstructed due to *kapha*, and *pitta* spreads throughout the *shakha* by the *vayu*ⁱⁱ. So *vataja-kaphaja prakriti* of patients are more prone to *shakhashrita kamala* because little *apathya* may also increase the *vata* and *kapha*.

Table No.2- According to *sara*, *sanhanana*, *satmya*, *satva*, *ahara shakti*, and *vyayama shakti* maximum patients were from *madhyama* categories, it may be due to more proportion of population fallen under *madhyama* categories in comparison to *pravara* and *avara* categories, hence the No. of *madhyama* categories of patients are highⁱⁱⁱ.

Table No.3- According to *nadi*, maximum No. of patients were found of *kaphaja- pittaja nadi* (40%) followed by *vataja- kaphaja nadi* (20%) and *paittika nadi* (16.66%), it may be explained on the basis of pathogenesis of *kamala*. As we know that *kamala* is a *pitta* predominant disease and arose either due to direct increase of *pitta* or hampered secretion of *pitta* due to obstruction in *pittavaha srotasa*^{iv}, that's why *kapha-pittaja nadi* were found more.

^vTable No. 4- Maximum No. of patients 18 (60%) were found of poor appetite and slightly low % (36.67) of moderate appetite. Because maximum number of patients was suffered with obstruction of *pittavaha srotasa* and *pitta* does not reach into the *pachyamanashaya* and originate the *mandagni*. Due to severity of *mandagni* patient sow the loss of appetite. In this research work maximum number of patient were from poor appetite perhaps because of maximum No. of patient was suffering with the severe *mandagni*.

Table No 5- Maximum No. of patients 19 (63.33%) were found of *vishamagni*, and then followed by *mandagni* 8 (26.67%). In *kamala* patients, *vata-prakopa* occurs due to *avrta kapha* and this *prakupita-vata* is responsible for *vishmagni* especially in *shakhashrita kamala*. *Mandagin* also occurs in this type of *kamala* due to lack of *pitta* in *pachyamanashaya*. All the above evidence proved that, why was the maximum numbers of patients found of *vishamagni*^{vi}.

Table No.6 - Maximum No. of patients 18 (60%) were found in *mridu koshtha*. The *shleshma prakriti* of people has the *mridu koshtha*^{vii} and everybody takes the diet reverse of their *prakriti* for maintain their health^{viii}. If *mridu koshthi* man takes only little *kapha vardhaka* diet, then increased *kapha* obstruct the *pittavaha srotasa* and leads to the *kamala roga*. Perhaps due to above cause the % of occurrence of *kamala* in *madhyama koshtha* was more than the other *koshtas*.

^{ix}Table No.7- The maximum No. of patients 11 (36.36%) were found in age group of 31-40 years, this age group is the transitional stage of age group where *kapha* is go down and *pitta* is go up progressively. It means any influencing *nidanas* like *ahara*, *vihara* and *manshika* can lead to the *pitta* and produce the *kamala roga*. In the age groups of 10-20 years and 21-30 years were also found the 26.66% and 20% patients of *kamala* respectively. As we know that *kapha* is the predominant in this age group and *kapha* increasing diet can easily cause the *sanga* in *pittavaha srotasa* and leads the *shakhashrita kamala*.
^xAccording to modern medical science it is also proved that the children and adult both are more prone to hepatitis A and only adult for other hepatitis.

CONLUSSION:-

From the above obtained and tabulated data of various factors whose are influence the origin of disease are entirely correlated with the koshthshakhaashrit kamala (hepato-cellular jaundice) ailment. This is explain that why the origin and pathogenesis of disease are multifactorial.

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