

A Case Study on the Ayurvedic Management of Koshta Shakashrita Kamala WSR Alcoholic Hepatitis

Mahadev Sogi

Abstract: Kamala is pitta pradhana and raktapradoshajavyadhi. Koshtashkashrita kamala can occur as a sequele of panduroga or it can also manifest as an independent disease. It is characterised by haridranetra, mootra, twak, raktapeetavarchas and bhekavarna, daha, avipaka, dourbalya and aruchi. ³Koshtashkashrita kamala can be taken as hepatocellular jaundice. Hepatocellular jaundice caused by infection (viral infection being most common), chronic alcohol intake, acute or chronic hepatotoxicity caused by drugs. Abnormal liver function test value i.e. SGPT and SGOT RATIO 1:2. On physical examination and as per the liver functional test this case was diagnosed as Koshtashrita Kamala which is very similar to Hepatocellular jaundice due to its resemblance. In Ayurveda, aftedipanapachana and doshavasechana in terms of virechana, is the first line of treatment of Kamala. The treatment protocol included internal administration of herbomineral formulations i.e. DPACK VATI, and Drakshadikashaya, for virechana Drakshadighrita and Trivrutleha showed effective in the management of koshtashkashrita kamala. With Pathyapalana protocol of 30 days. Further subsiding of symptoms was observed after sixteen days of treatment. Liver function test was improved by as compared to before after intervention significantly.

Keywords: Ayurveda, Hepatocellular Jaundice, Kamala, Virechana

1. Introduction

Kamala is pitta pradhana¹ and raktapradoshaja vyadhi.²Two types of kamala are mentioned in ayurvedic classics koshtashkashrita kamala and shakhashrita kamala. Koshtashkashrita kamala can occur as a sequele of panduroga or it can also manifest as an independent disease. It is characterised by haridranetra, mootra, twak, raktapeetavarchas and bhekavarna, daha, avipaka, dourbalya and aruchi.³

Koshtashkashrita kamala can be taken as hepatocellular jaundice. Hepatocellular jaundice caused by infection (viral infection being most common), chronic alcohol intake, acute or chronic hepatotoxicity caused by drugs.

Government statistics show that 14 million Indians are heavy drinkers and may be considered as alcohol dependent ⁴

The signs and symptoms of alcoholic hepatitis are changes in appetite, dry mouth, weight loss, nausea, vomiting, pain and swelling in abdomen, yellowish discoloration of skin and eyes, changes in mental state, confusion and fatigue.⁵

There is no specific management of alcoholic hepatitis except abstinence is advised, good nutrition is ensured and micronutrients such as thiamine and foliate are substituted⁶

2. Case History

A 31-years-old male patient came to OPD on 2/1/2019 with complaints of chardi (vomiting), ajirna (indigestion), dourbalya (weakness) since last 3 days. Patient had ajirna (indigestion) since last 15 days.

There was found yellowish discolouration of sclera, nails and skin. Patient complained of dark yellow coloured urination 4-5 times in a day. Patient did have addiction alcohol since 9

years. And he consumed more than 50 gm of alcohol every past 9 year she was not suffering from hypertension, diabetes, and any other major illness.

For this case patient was advised laboratory investigations and USG abdomen, Routine blood and urine investigation for CBC, RBS, HBsAG, and URINER-M were within normal limit except increased SGPT and Serum Bilirubin. Based on clinical findings, examination and laboratory investigation this patient was diagnosed as koshtashritakamala (Hepatocellular jaundice).

Intervention

- 1) Drakshadikwatha 50 ml in 2 equally divided doses after food for initial 20days
- 2) DPACK vati 3gm in three equally divided doses after food with water for initial 20 days.

Second Stage of Intervention

- 1) Shodhananga Snehapana will be administered from 21st -23rd day with drakshadigritha till samyaksnigdhalakshanas are attained
- 2) Abhyanga with ksheerabalataila followed by mrudusweda for 3 days.
- 3) Virechana given with trivrutlehya 30-50gm dose will be fixed according to the koshta and bala of the subject.
- 4) Samsarjanakrama will be followed according to the type of shuddhi.

Table 1: Lab Investigations at Baseline (2/1/2019)

Hemogram			
Hb	10.8g/dl	DLC	
Total RBC count	4.9 mill/cmm	Polymorphs	59 %
P.C.V	35.9 %	Lymphocyte	36 %
M.C.V	72.0femtolitre	Eosinophils	03 %
M.C.H.	66.8 pg	Monocytes	02 %
M.C.H.C.	31.6g/dl	Basophils	00 %
R.D.W.	17.4 %	Plateletcount	3, 36, 000 /cmm
Total WBC count	6500 /cmm	Polymorphs	59 %
Blood sugar			

Volume 11 Issue 5, May 2022

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

RBS		72.0mg/dl	
Urine analysis			
Physical examination		Microscopic examination	
Colour	Deep yellow	Redcells	Absent/H.P.F
Appearance	Clear	Puscells	Occasional/H.P.F
Chemical examination		Epithelial cells	Occasional/H.P.F
Reaction	Acidic	Casts	Absent/H.P.F.
Sp. gravity	Q.I.	Crystals	Absent
Protein	Trace	Trichomonasvag.	Absent
Glucose	Absent		
S.Bilirubin			
S.Bilirubin (Total)		39.91mg/dl	
S.Bilirubin (Direct)		16.86mg/dl	
S.Bilirubin (Indirect)		23.05mg/dl	
S.G.P.T (ALT)			
S.G.P.T		183 U/L	

Table 2: USG Abdomen (9/3/2019)

Liver, Gall bladder, Pancreas, Spleen, Kidneys, Urinary bladder were found normal.
Impression: Pericholecystic & periportal cuffing & few enlarged periportal lymph nodes.

Table 3: Prescribed treatment with Dose and Duration

Medicine	Dose	Duration
<i>Drakshadi kashaya</i> ⁷ (sitaram pharmacy)	25 mlBD in decoctionform	20days
<i>Daruharidra</i> ⁸ , <i>Pippali</i> ⁹ , <i>Ashwaganda</i> ¹⁰ , <i>Chitraka</i> ¹¹ , <i>kalmegha</i> ¹² DPACK VATI	2tablet TDS	20days
<i>Drakshadi Ghrita</i> ¹³	For <i>Snehapana</i>	3-5days
<i>Trivrut lehua</i> ¹⁴	for <i>virechana</i>	30gm

Table 4: Liver function tests before and after treatment

Liver function test (LFT)	Normal Range value	On 2/1/2019	On 3/2/2019	On 9/3/2019
S.G.P.T.	05-45 U/L	183 U/L	35 U/L	27 U/L
S.bilirubin total	0.1-1.2mg/dl	39.91mg/dl	9.20mg/dl	2.09 mg/dl
S.bilirubin direct	0-0.3mg/dl	16.86mg/dl	4.91mg/dl	0.9 mg/dl
S.bilirubin indirect	0-0.9mg/dl	23.05mg/dl	4.29mg/dl	1.2 mg/dl

3. Results and Discussion

Treatment was advised for 30 days (Tableno.3). With this treatment liver function tests were repeated after six days of treatment. The patient had shown remission in vomiting and also in associated symptoms after three days of treatment. Patient has been made to follow *Pathya* (wholesome) strictly as described in classics. Further subsidence was observed in all symptoms after sixteen days of treatment (Tableno.4).

Drpack Vati-

The ingredients of formulation are *daruharidra*, *ashwagandha*, *chitraka*, *pippali*, *kalmegha*. In the study drugs were selected based on their targeted actions, like antioxidant, anti-inflammatory, hepatoprotective, antipyretic, choleric, chologogue actions.

Daruharidra:

Daruharidra contains alkaloid named as berberine and berberine sulphates. The studies on *daruharidra* revealed that it reduces lipid peroxides in hepatocytes and also minimize the effect of degeneration and necrosis of hepatocytes. It helps in regeneration of liver cells by stimulating nuclear polymerase A and increasing ribosomal

protein synthesis. The Butanolic extract of *berberis aristata* is having hepatoprotective activity.

Ashwagandha:

Ashwagandha contains with aferine, with asomnine and several other steroidal lactones. These steroidal contents relieved the complaints like insomnia, pyrexia and anxiety in the subjects.

Chitraka:

Chitraka contains alkaloid named as plumbagin. It acts as hepatoprotective, antioxidant and an effective agent in relieving symptoms like loss of appetite and indigestion. The methanolic extract of aerial parts of *plumbago zeylanica* has been proven for reduction of SGOT, SGPT and ALP levels in serum.

Pippali:

Pippali acts as hepatoprotective, antiinflammatory, antispasmodic by the action of alkaloid piperine.

Kalmegha:

Kalmegha contains deoxyandrographolide and neo andrographolide. Studies on *kalmegha* suggest that it increases the choleric activity. It blocks the toxic effect of enzyme GGT in serum as well as in isolated hepatic cells. It also act as immunomodulator.

Drakshadi Kashaya

The ingredients present in the *kashaya* are having *tikta*, *kashaya* and *madhura rasa*. *Tikta rasa* is having *arochakaghna*, *deepana*, *pachana*, *jwaraghna* properties. *Tiktarasa* also facilitates the normal function of liver. *Tikta*, *kashaya* and *madhurarasa of kashaya* are having *pitta shamaka* property.

The above drug in the form of *Kashaya* has definite action in the disease *Kamala*, according to various classical texts. It is seen that most of the formulations indicated in *Kamala* contain majority of these drugs. *kashaya is laghu* for digestion and it can be easily administered.

Virechana Karma

Hormonal Action: *Virechanadrugs* causes irritation in intestinal mucosa, leading to excessive secretions from intestinal mucosa like hepatocrinin, secretin and cholecystokinin. This leads to irritation and stimulation of vagus nerve. Vagus nerve causes irritation of liver and pancreas which causes increase in small intestinal secretions.

Whenever a segment of large intestine is irritated, then mucosa secretes large quantities of water and electrolytes in addition to alkaline mucus. This leads to dilution of irritating factors and cause rapid movements of the feces towards rectal route. The mechanism by which marked secretion of watery fluid by crypts of Lieberkuhn occur is unknown. However, two active secretory processes occur. Active secretion of chloride ions (into the crypts) and bicarbonate ions. The secretion of chloride ions causes electrical transfer of sodium ions through the membrane. All these factors causes osmotic movement of water and hence fluidity in the purgation increases.

Elimination of Bile: Hepatocinin stimulates liver to secrete bile. Cholecystokinin hormone causes contraction of gall bladder. This causes increased secretion of digestive enzymes from pancreas.

Gall Bladder is also stimulated by acetylcholine. Due to the relaxant action of sphincter of oddi, bile enters into duodenum which is eliminated at the time of purgation. This bile contains solids, bile salts, bile pigments, bile acids, cholesterol, lecithin, water, sodium, potassium, bicarbonate ions, fat and fatty acids.

In the present study subjects were advised fat free diet initially. So that hepatocytes acts on toxic products of alcohol and to do the proper conjugation. To relieve from hepatocellular dysfunction and interhepatocellular cholestasis.

Through virechana excess conjugated bilirubin can be excreted. Virechana relieved cholestasis by elimination of excess mala roopi pitta by cholagogue action.

4. Conclusion

Drakshadikashaya has a role in countering withdrawal symptoms of alcohol. It mainly acts as a pitta shamaka due to the virtue of its main ingredient. It is indicated in *daha, trushna, kamala, visha, amlapitta, madatyaya*. *Draksha, usheera* had *pittakaphahara* properties which help in the reduction of nausea and vomiting. The drugs of DPACK vati have hepato protective activity, anti oxidant, anti inflammatory properties. *Daruharidra* has hepato protective activity and plays an important role in regeneration of hepatocytes. The drug *ashwagandha* have *rasayana* property and specifically act on the CNS manifestations in Alcoholic hepatitis like confusion, tremors, insomnia. *Chitraka* mainly acts as *adeepana and pachana* which helps in improving the appetite. *Kalamegha* has choloretic action and specifically acts in reduction of elevated liver function parameters in Alcoholic hepatitis. It also acts as an immune modulator and increases the excretion of toxins from the liver. The combined effect of these formulations probably have resulted in hepato protective activity and helped in hepatic tissue regeneration. Hence this combination of DPACK vati, *drakshadikashaya* and *virechanahas* probably has a significant role in the management of *koshtashakhashrita Kamala*.

References

- [1] Acharya Yadavjitrkamji, Charaka Samhita of Agnivesha, Chakrapani Datta's Ayurveda deepika (sans), Edition reprint-2014, Sutrasthana 20/14, Chaukambha Sanskrit Series Office, Varasnasi, pp: 114.
- [2] Acharya Yadavjitrkamji, Charaka Samhita of Agnivesha, ChakrapaniDatta's Ayurveda deepika (sans), Edition reprint-2014, Sutrasthana 28/11, Chaukambha Sanskrit Series Office, Varasnasi, pp: 191
- [3] Acharya Yadavjitrkamji, Charaka Samhita of Agnivesha, Chakrapani Datta's Ayurveda deepika (sans), Edition reprint-2014, Chikitsa Sthana 16/36, Chaukambha Sanskrit Series Office, Varasnasi, pp:528
- [4] Mark E. Milliard, Michel F.Sorrell Harrison's principles of Internal Medicine, Volume – 2, Chapter 363 (section 2), Mc Graw Hill Publication, 19thedition, pp:2050
- [5] Rajesh Upadhya and Nitin Gupta Y. P. Munjal, API Text Book of Medicine, Volume -Chapter- 7, Jaypee Brothers Medical Publishers, 10th Edition, pp:1184
- [6] Rajesh Upadhya and Nitin Gupta Y. P. Munjal, API Text Book of Medicine, Volume -Chapter- 7, Jaypee Brothers Medical Publishers, 10th Edition, pp:1188
- [7] sahasrayogakashayaprakarana
- [8] B T Kavitha, S D Shruthipadmalatharai, Y L Ramachandra "Phytochemical analysis and hepatoprotective properties of tinosporacordifolia against carbon tetra chloride induced hepatic damage in rats.2011.
- [9] N. Kanchanaand Mohamed Sadiq "Review on morphology chemical constituents and phyto pharmacological activities of plumbago zeylanica, 2014
- [10] S. Vetrivelvan and Anil midhha; Potential action of Andrographispaniculata against Ethanol consumption induced liver toxicity in experimental rat.
- [11] Eshwarikumarikilari, lakshmisudeeptishastri were shown piper longum extract oncognitive performance.
- [12] Nyama sultana, Sadiachoudhury Shimmi, M. Tanveerhossainparash, Jesmine Akthar "Effect of Ashwagandha (withaniasomnifera)root extract on some liver marker enzymes, in gentamycin intoxicated rats.2012.
- [13] Sahasrayogaghritaprakarana
- [14] Vagbhata, Astanga Hridaya, Arunadatta's Sarvanga Sundara and Hemadri's Ayurveda Rasayana (sans), kalpasthan 2/9 Chaukambha Surbharati Prakashan, Varasnasi, Edition-reprint- 2010 pp. 520