

A CRITICAL REVIEW OF PHALTRIKADI KWATH WSR TO LIVER DISORDERS

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ABSTRACT

In *Ayurvedic* Classics a number of single drugs and formulations have been mentioned for treatment of liver disorders. *Phalatrikadi Kwath/ decoction* is one of the important and prestigious formulation, which is successfully used from the ancient period. **Aim:** The main aim of this review study to know the pharmacological action of this formula on the level of *dosha* (physiological entity of our body), *bhutagni* as we know that liver is the main seat of the *bhutagni* and positive role of *Phalatrikadi kwath* in treatment/avoiding harmful effects of so many agents as drugs, chemicals, toxins and alcohol. Due to the properties like - *Pitta*, *Kapha-shamaka*, *Yakriduttejaka*, *Shothahara*, *Pandurogahar*, *Rechan*, *Deepan* etc. *Kwath of Triphala* (*Hareetaki*, *Vibheetaki* and *Amalaki*), *Amrita*, *Nimba*, *Tikta* (*Katuki*), *Vasa*, and *Kiratattikta* (*Bhunimb*) taken with honey pacify the *koshthashrit kamala* and *Pandu*.

KEY WORDS: *Phalatrikadi kwath*, *koshthashrit kamala*, *bhutwagni*, *tikta ras*, *cirrhosis* and *dosha*.

INTRODUCTION

Phalatrikadi kwath, this formulation had been mentioned in the context of *Pandu* and *Kamala* in *Chakradatta* (8/8), *Sharangdhara Samhita* (2/75), *Yoga Ratnakar* (5th sloka) *pandu rog* and *Bhaisajya Ratnavali* (12/22). *Phalatrikadi Kwath* contains eight drugs which are predominately useful in the treatment of *koshthashrit kamala* / Hepatocellular jaundice, Cirrhosis, Alcoholic hepatitis, Fatty liver and more likewise condition of liver. First described in *Chakradatta* written by Chakrapanidutta in 11th century and later on many texts, is the most popular and effective preparation contains the eight herbs namely *Hareetiki*, *Vibhitiki*, *Amalki*, *Amrita*, *Katuki*, *Nimba*, *Kirattika* and *Vasa*. In the present review study I had tried to understand and explain the properties, mode of action on *dosa* (physiological entities of human body), mechanism of action on modern medicine parameters and research works conducted in different universities. The description of each herbs explained on all the above parameters.

1. Hareetiki Latin Name: Terminalia chebula Family: Combretaceae**Pharmacodynamic properties***Rasa* : *Pancha Rasa* (*Lavana Varjita*, *Kashaya Pradhana*)*Guna* : *nLaghu*, *Ruksha**Veerya* : *Ushna**Vipaka* : *Madhura**Prabhava*: *Tridosahar***Chemical Composition:** 18-Amino acids and sugar in abundant quantity. Tannin, Chebulagic acid, Chebulinic acid, Corilagin. Phosphoric, Succinic, Kwinic, Shikimic in less quantity.**Main Actions:** Diuretics and Cardiotonic, Immunosuppressive effect on Carbon Tetra Chloride (CCl₄) mediated toxicity and Anti microbial effect.**Actions on Tridosha:** *Tridosahar*, especially *Vata Shamak* due to *Amla* and *Madhura* it pacifies *Vata*, due to *Madhura*, *Tikta*, *Kashaya* it pacifies *Pitta*, Due to *Katu*, *Tikta* and *Kashaya* it pacifies *Kapha*. *Agnideepan*, *Pachan*, *yakriduttejak*, *Anuloman*, *Mridurechan*, *Krimighna*, *Mutrala*, *Medhya*, *Rasayan*, *Netrya*, *Ayurvardhak* and *Bhrimhana*.**Pharmacological Studies**

1. According to Caius, Mhaskar and Isaac, the bark is endowed with both diuretics and cardiotonic properties. Adaptogenic properties of six Rasayana herbs used in Ayurvedic medicine (*T. chebula*) (Rege-NN *et al.* *Ayurveda* Research Center, Department of Pharmacology and Therapeutics, Seth GSF Medical College, Mumbai, 1999).
2. Immunosuppressive effects of gallic acid and chebulic acid on CTL- mediated toxicity. (Hamada S *et al.*, Department of Bioengineering, Tokyo Institute of Technology, Yokohama, Japan, 1997).

- Screening of some Indian medicinal plants for their antimicrobial properties (*T. chebula*). (Ahmad I *et al.*, Department of Agriculture Microbiology, Institute of Agriculture, Aligarh Muslim University, 1998).

2. *Vibheetaki* Latin Name: *Terminalia bellerica*

Family: Combretaceae

Pharmacodynamic properties

Rasa : Kashaya

Guna : Ruksha, Laghu

Veerya : Ushna

Vipaka : Madhura

Chemical composition: Tannin, Citosterol, Gailic acid, Chebulagic acid, Mannitol, Glucose, Ethyl glyete, Eolegic acid, Galactose, Fructose and Raimanose.

Main actions: Anti oxidant, Hepato protective action of fruits and Anti microbial Property.

Actions on Tridosha: *Tridosahar*, especially *Kapha Shamak*, due to *Ushna Veerya* it pacifies *Vata*, due to *Kashaya Rasa* and *Madhura Vipaka* it pacified *Pitta*, due to *Ruksha, Laghu* and *Kashaya* it pacifies *Kapha. Bedhanam, Deepanam, Anuloman, Vedanasthapan, Rakta-stambhan, Chakshushya, Dhaturvardhak.*

Pharmacological studies

- Screening of some Indian medicinal plants for their antimicrobial properties (*T. bellerica*) (Aligarh Muslim University, India, 1998. Antioxidant properties of the *Ayurvedic* formulation *Triphala* and its constituents; (Vani T. *et al.*, Department of Phytochemistry and Pharmacognosy, L.M. College of Pharmacy, Ahmedabad, Gujarat.
- Hepatoprotective studies of a fraction from the fruits of *T. bellerica* on experimental liver injury in rodents (Anand K.K. *et al.*; Division of Pharmacology, Regional Research Laboratory, Jammu).

3. *Amalki* Latin Name – *Emblica officinalis* Family *Euphorbiaceae*

Pharmaco-dynamic properties

Rasa : Pancha rasa (*lavana varjita, Amlarasa pradhan*)

Guna : Laghu, Ruksha

Veerya : Sheeta

Vipaka : Madhura

Chemical Composition: Fruits and leaves: Tannins, poly phenolic compounds like – 1,3,6 trigalloyl glucose, terchebin, corialgin and ellagic acid, alkalines like – phyllantidine and phyllantine. Leaves and stem: Lupeol, β -sitosterol, phyllembin. Roots: Ellagic acid. The ethanol soluble fraction contains free sugars, D-glucose, D-fructose, D-myo-inositol. The acidic water soluble fraction contains a pectin with D-galacturonic acid, D-arabinosyl, D-mannosyl and D-galactosyl residues.

Main Action: Reduce free fatty acids, SGOT, SGPT, LDH, Serum Cholesterol and Hepatic Cholesterol. *Amalki rasayan* increases total Serum Protein and Body wt. It shows Anti inflammatory, Membrane Stabilizing Action, Anti oxidant due to gallic acid and tannoid principles, Anti viral activity, Protection against cytotoxic effect of arsenic with extracts of fruits. Cardiotoxic and expectorant action.

Actions on Tridosha: *Tridosahar*, especially *Pitta Shamak*, due to *Amla Ras* it pacifies *Vata*, due to *Madhura* and *Sheeta* it pacifies *Pitta*, due to *Ruksha* and *Kashaya* it pacifies *Kapha. Aruchi, Agnimandya, Vibandha, Yakridvikara, Amlapitta, Udara Roga, Hridroga, Rakta Pitta, Jeerna Jwara, Dourbalya, Kshaya, Shotha* etc.

Pharmacological studies

- The alcoholic extract of the fruit was found to have antiviral effect (Dhar *et al.*, 1968). Fruit, juice and its sediment and residue has antioxidant due to gallic acid (Pak J. Sci. Res., 1966).
- Useful in acute viral hepatitis (Indian J. Med. Res., 1980). Fresh root as remedy for jaundice (Acta Phytotherapy, 1972). It has pronounced expectorant and cardiotoxic activities (Husain, Aligarh Muslim University, 1975).
- Levels of SGOT, SGPT, LDH, serum free fatty acids were significantly decreased, in groups treated with this. *Amalaki Rasayan* raised the total protein level and increased the body weight in rabbits. The dried fruit pulp powder reduced serum cholesterol ($p < 0.01$) an aortic cholesterol ($p < 0.001$) and hepatic cholesterol ($p < 0.001$) significantly in experimental study on rabbits.
- Antioxidant activity of active tannoid principles of *E. Officinalis* (Bhattacharya *et al.*, Department of Chemistry, Bose Institute, Calcutta, Indian J. Exp. Biol., 1999 Jul., 37 (7).
- Protection against cytotoxic effects of arsenic by dietary supplementation with crude extract of *Emblica officinalis* fruit (Bishwas *et al.*, Vivekananda Institute of Medial Sciences, Calcutta; Phytother Res., 1999 Sep., 13 (6).
- Adaptogenic properties of six Rasayana herbs used in *Ayurvedic* medicine (including *E. Officinalis*) (Rege NN *et al.*, *Ayurveda* Research center, department of Pharmacology and Therapeutics; Seth GS Medical College, Parel, Mumbai; Phytother Res. 1999 June 13 (4).
- Anti-inflammatory activities of *E. Officinalis*, Gaertn leaf extracts. (Aswani MZ, Department of Biomedical Sciences, University of Tempere, Finland; J. Pharm-Pharmacol. 1993 Jun : 45 (6).
- Screening of some Indian medicinal plants for their antimicrobial properties (*E. Officinalis*) (Ahmad I *et al.*, Department of Agricultural Microbiology, Institute of Agriculture, Aligarh Muslim University, 1998)

4. *Amrita* Latin Name: *Tinospora cordifolia* Family: Menispermaceae

Pharmacodynamic properties

Rasa : Tikta, Kashaya

Guna : Guru, Snigdha

Veerya : Ushna

Vipaka : Madhura

Chemical Composition: Fresh stem bark contains Giloin, Giloinin, gilosterol and also it contains Berberine.

Main Actions: Anti oxidant action of roots (Reduce Cyclophosphamide induced toxicity), Adaptogenic properties, Immunotherapy in the treatment of obstructive jaundice, Immuno modulating agent, Extracts reducing the Chemotherapy induced by radicals, Phagocytic activity It suppresses the Kuffer cells (causes liver injury)

Actions on Tridosha: *Tridosha Shamak, Due to Snigdha and Ushna it pacifies Vata; Due to Tikta and Kashaya it pacifies Kapha and Pitta. Tridoshaghna, Rasayan, Balya, Jwarahar, Deepan, Mutrajanan, Twakrogahar, Pittasarak, Vishghna and Hridya.*

Pharmacological studies

1. Antioxidant activity of *Tinospora cordifolia* roots in experimental diabetes. (Prince PS *et al.*, Department of Biochemistry, Annamalai University, Tamil Nadu; J Ethnopharmacol, 1999 June; 65 (3).
2. Adaptogenic properties of six Rasayana herbs (Including *T. cordifolia*) used in Ayurvedic medicine (It may induce genotypic adaptation). Rege NN *et al.*, Ayurveda Research Centre, Department of Pharmacology and Therapeutics, Seth GS Medical College, Mumbai, 1999).
3. Immunotherapy with *Tinospora cordifolia* : a new lead in the management of obstructive jaundice. R Rege N *et al.*, Gastroenterol, 1993 Jan; 12 (1).
4. Antioxidant activity of *Tinospora cordifolia* and its usefulness in the amelioration of cyclophosphamide induced toxicity. Mathew S *et al.*, Amala Cancer Research Centre, Amla Nagar, Thrissur, Kerala, 1997.
5. Immuno-potentiating compounds from *T. cordifolia* (with anti-complimentary an 102ypogl-modulatory activities). Kapil A *et al.*, Pharmacology Division, Regional Research Laboratory, Jammu, 1997.

Mechanism of Actions

1. It suppresses the Koffer cases (major determinate of outcome of liver injury) function in chronic liver damage.
2. Its extract is used in reducing the chemotherapy induced by the radica
3. In obstructive jaundice the cholestatis results in immune-suppression and hence indicates the need of immuno-modulators in management of obstructive

jaundice. *Tinospora cordifolia* seems to be meet this need by consolidating hot mechanism.

4. In immuno-modolative studies it enhances the humoral immunity. Cell mediated immune response is stimulated but T-cell count remains unaffected.
5. The phagocyte and killing capacity of nephrotic normalizes in patients receiving *Tinospora cordifolia*

5. *Nimb* Latn Name: *Azadirachta indica* Family: Meliaceae

Pharmacodynamic Properties:

Rasa : Tikta, Kashaya

Guna : Laghu

Veerya : Sheeta

Vipaka : Katu

Chemical Composition: **Flowers** Kaempferol, Quarcetin and Myricetin, **Bark-** Nimbinine, Nimbin, Nimbidine and Nimbosterol, Tannin, Margosine, **Oil-** Oleic acid, Linolic acid, Palmitic acid, Stearic acid, Archidic acid, Lingoceric acid, Sodium and Sulphar Margosate.

Main Actions: Nimbidin act as antiinflammatory action in acute and chronic conditions, analgesic and antipyretic, antibacterial and antiviral effect, hepato protective action and Immuno potentiating effect and Aqueous extract effect on immune response.

Action on Tridosha: *Kapha Pitta shamak, mainly due to Tikta Rasa it pecifies Kapha and Pitta. Jantughna, Vranapachan, Vrana Sodha, Rochan, Krimighna, Yakriduttejak, Rakta Vikaraghana, Shothahara, Amapachan, Jwaraghna, Dahaprasaman.*

Pharmacological Studies

1. Effect of an aqueous extract of *Azadirachta indica* on the immune response on mice. Nijro SM *et al.*, Department of Veterinary Pathology and Microbiology, University of Nairobi, Kebeta, Kenya and Erstepoort, J. Vet. Res. 1999, Mar. 66 (10).
2. Immunopotentiating effects of *Azadirachta indica*, dry leaves – powder in broilers, naturally infected with IBD (Infectious bursal disease) virus. Sadekar RD *et al.*, Department of Pharmacology and Medicine, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, 1998.
3. Possible biochemical mode of anti-inflammatory action of *A. Indica* in Rats. Chattopadhyay RR, Biometry Research Unit, Indian Statistical Institute, Calcutta, 1998.
4. Antibacterial activity of East African Medicinal Plants (*A. Indica*). Fabry W *et al.*, Institute fur Medizinische Mikrobiologic, Germany, 1998.
5. Antiviral effect of leaves (*A. Indica*). Indian J. Med. Res., 1969.
6. Various plant parts used in inflammation and fever (Econ. Bot., 1970).
7. Nimbidin, form Neem oil – effective in acute and chronic inflammations (Pant Med., 1981).

8. Nimbidin acts as a analgesic and antipyretic in rats (Bull. Med. Ethno. Bot. Res. 1980).
9. Possible mechanism of hepatoprotective activity of A. Indica leaf extract (Pub. Med. J. Ethon. Ph., 2003).

6. Katuki Latin Name: Picrorhiza kurroa Family: Scrophulariaceae

Pharmacodynamic properties

| | |
|----------|---------------|
| Rasa : | Tikta |
| Guna : | Ruksha, Laghu |
| Veerya : | Sheeta |
| Vipaka : | Katu |

Chemical Composition: Glycosides, Dextrose, Acetone, Ethyl acetate, Chlorophorm, Benzene and Ether, Picrorhizin, Picrohizetin, kutkin and Cathartic acid.

Main Actions: Kutkin effective against viral hepatitis and chemical/ Alcoholic induced liver toxicity, Extracts effective in liver abnormalities, Picrolive protects against alcoholic induced liver toxicity, aflatoxin β_1 acute hepatotoxicity, Prevention of Paracetamol hepatic damage, Silybum marianum in the treatment of liver diseases, Antioxidant hepato protective effect by reducing lipid peroxidase and free radical damage, Antiinflammatory cells as macrophages, mast cells and platelets activating cells, Picrorhiza extract inhibited membrane mediation activation of these cells and Stimulation of liver regeneration like Silymarin.

Actions on Tridosha: *Kapha Pitta Shamaka*; Due to *Tikta Rasa, Laghu, Ruksha, Guna* and *Katu Vipaka* it pacifies the *Kapha* and due to *Tikta Rasa, Sheeta Veerya* it pacifies *Pitta*. *Deepan, Pachan, Pittarechak*, In low doses it acts as *Samsran*, in high doses it acts as *Virechak*.

Pharmacological studies: *Katuki* contains Kutkin the bitter active principle. Experimental studies confirm the known efficacy of Kutkin in viral hepatitis as well as in hepatic abnormalities caused by alcohol or other hepatotoxic agents.

1. Effect of different extracts of *Kutki* on experimentally induced abnormalities in the liver. (Pandey V.N. *et al.*, Indian J. Med Res., 1969, March: 57/3).
2. Picroliv protects against alcohol induced chronic hepatotoxicity in rats. (Rastogi R *et al.*, Planta Med., 1996, June: 62/6, Biochemistry Division, C.D.R.I., Lucknow, India)
3. Picroliv, the iridoid glycoside fraction of *Picrorhiza kurroa*, selectively augments human J cell response to mycobacterial protein antigens. Sinha S *et al.*, Immuno. Pharmacol. Immunotoxicol, 1998, Nov.: 20(4).
4. Prevention of Paracetamol induced hepatic damage in Rats by Picroliv- the standardized fraction from *Picrorhiza kurroa* (Dwivedi Y *et al.*, Phytoether Res., 1991, 5-115).

5. A review of Plants used (*Picrorhiza kurroa*, *Silybum marianum*) in the treatment of liver disease: Par One. (South West College of Naturopathic Medicine: 2140 East Broad Way Rd. Tempe, Az 85282, USA, Altern. Med. Rev., 1998, Dec: 3(6).
6. Picroliv Protects against aflatoxin β_1 acute hepato toxicity in rats. (Dwivedi and Rastogi *et al.*, Department of Pathology, King George's Medical College, Lucknow, India; Pharmacol. Res. 1993, Feb-Mar: 27(2).

Mechanism of Actions

1. **Antioxidant:** The mechanism of action by which *Picrorhiza* affords the protection to liver is not completely understood but several possibilities have come to light. It possesses antioxidant *in vivo* which may contribute to the hepatoprotective effect by reducing lipid peroxidate and free radical damage. Chandre *et al.* found that *Picrorhiza* and its constituents picroside-I and Kutkoside inhibits the non-enzymatic generation of O_2^- anion in a phenazime methasulphate NaOH system, inhibits oxidative malondialdehyde generative by both the free Fe^{++} system and scavenge superoxide anion O_2^- generated in a xanthine-xanthane oxidase system. In other words the *picrorhiza* demonstrates the antioxidant relivity similar to that of superoxide dismutase metal ion chelater and xanthine oxidase inhibitors. Generative of lipid peroxidative in African rats injected with plasmodium berghei was significantly reduced by *picrorhiza* at the oral dose 6 mg/kg for two weeks.
2. **Stimulation of liver regeneration:** Like silymarin *picrorhiza* may have an effect on the regeneration. A study in 1992 demonstrated that it stimulates nucleic acids and protein system in rat liver with oral administrative of *picrorhiza*. Anti-inflammatory cells as micro-neutrophils macrophages and mast cells and platelet activating cells. *Picrorhiza* extract inhibited membrane mediation activation of these cells (inhibited α -adrenergic receptors).

7. Vasa Latin Name: Adhatoda vasica Family: Acanthaceae

Pharmacodynamic properties

| | |
|----------|----------------|
| Rasa : | Tikta, Kashaya |
| Guna : | Ruksha, aghu |
| Veerya : | Sheeta |
| Vipaka : | Katu |

Chemical Composition: Vesicine, Adhatodic Acid, Vesicinol.

Main actions: *Shothahara, Jantughna, Vedanasthapana, Hridhya, Sleshmaha, Kasahara, Mutrajanana, Swedajanana, Jwarhar.*

Action: Anti viral and 103 ypoglycaemic action shows by leaves and roots, Leaves extracts used in Liver

enlargement and fever, Antibacterial activity and Mucolytic action.

Actions on Tridosha: *Kapha Pitta Shamak* Due to *Sheeta, Tikta* and *Kashaya* it pacifies *Pitta* and due to *Laghu, Ruksha, Tikta* and *Kashaya* it pacifies *Kapha*.

Pharmacological studies

1. Leaves shoots in liver enlargement (Nagarjun, 1980-81).
2. Leaves used in fever and jaundice (Bull Bot Soc Bengal, 1972).
3. Leaves and roots have a hypoglycemic and antiviral against Ranikhet disease virus (Indian J. Exp. Biol., 1968). Antibacterial effect (with India IA'79)

8. *Kirattikta/Bhunimb* Latin Name: *Swertia chirata*

Family: **Gentianaceae**

Pharmacodynamic Properties

Rasa : *Tikta, Kashaya*

Guna : *Laghu*

Veerya : *Sheeta*

Vipaka : *Katu*

Actions on Tridosha: *Tridosha Shamak* especially *Kapha Pitta Shamak* due to *Ushna Veerya* it pacifies *Vata* and due to *Tikta*, it pacifies *Kapha* and *Pitta*.

Pharmacological characters of *Phaltrikadi kwath*

| S.N. | Ingredient | Rasa | Guna | Veerya | Vipaka | Dosa Karma |
|---------------------|-------------|--|------------------------------|--------------|---------------|-------------------|
| 1. | Amalaki | Pancharasa (alavana-Amla pradhana) | Laghu, Ruksha | Sheeta | Madhura | Tridosahar |
| 2. | Hareetaki | Pancharasa (alavana Kashaya pradhana) | Laghu, Ruksha | Ushna | Madhura | Tridosahar |
| 3. | Vibheetaki | Kashaya | Ruksha, Laghu | Ushna | Madhura | Tridosahar |
| 4. | Amrita | Tikta, Kashaya | Guru, Snigdha | Ushna | Madhura | Tridosahar |
| 5. | Vasa | Tikta, Kashaya | Ruksha, Laghu | Sheeta | Katu | KaphaPitta Shamak |
| 6. | Katuki | Tikta | Laghu, Ruksha | Sheeta | Katu | KaphaPitta Shamak |
| 7. | Kiratatikta | Tikta | Laghu, Ruksha | Ushna | Katu | Tridosahar |
| 8. | Nimba | Tikta, Kashaya | Laghu | Sheeta | Katu | KaphaPitta Shamak |
| Phalatrikadi | | Pancharas (Alavana Tikta, Kashaya pradhan) | Laghu, Ruksha, Guru, Snigdha | Anushnasheet | Madhura/ Katu | Tridosahar |

On the Ayurvedic Parameters these Drugs are *Tikta, kashaya ras* predominant and *madhur* in *Vipaka*. So these are most effective and efficient to pacify the *Pitta dosha*, the main cause of many liver disorders.

DISCUSSION

So We can say on the basis of vivid description of all the eight herbal drugs, which is the constituents of well known decoction/*Kwath* namely *Phaltrikadi* is a most common and famous preparation for the treatment of *Koshthashrit Kamala/* Hepatocellular jaundice, *pandu /Anaemia* and other liver disorders. Since its a purely herbal preparation hence very much safe and more effective than any other *herbomineral* preparation. In Short these Drugs have following properties i.e. *Pittahar,*

Pharmacological studies

1. It has laxative property, and used in different fevers.
2. It causes a free discharge of bile while promoting a more healthy action.
3. Hepatoprotective effect of *Swertia chirata* on rat. (Mukherjee S *et al.*, Department of Zoology, University of Calcutta, 1997).
4. Anti-inflammatory activity of *Mangifera indica* and *Swertia chirata* (Das P.C.; Mandal. S. *et al.*, CCRAS, Department of Chemistry, University College of Science, Calcutta).
5. A source of bitter compounds for medical use in liver disorders (Datt. B. *et al.*, Department of Forrest Products, Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni Solan, H.P.).
6. Naturally occurring iridoids isolated from *S. chirata* with Pharmacological activity, Iridoids have encouraging biological activities including hepatoprotective, anticancer, immuno-stimulant and anti-leishmanial (Mandal S. *et al.*, Medicinal Chemistry Division, Indian Institute of Chemical Biology, Calcutta).

Pittarechak, Yakriduttejak, Deepan, Rechan, Pachak, Shothhara, Jwarahara, Kamala and Panduhara, Yakrit and Raktvikarhara, Tridoshar, Rashayan, Mutrajanana, Pittasarak, Anulomak, Shwedak, Dahaprashaman and Raktapittahara.

On the modern parameters we can say that the *Herbal* Hepato protective preparations have following properties Cholegogue and Cholertic action, Hepatocellular regeneration, Antiviral, Antioxident, Enzymes and Metabolic correction, Digestive, Membrane stabilizing effect, Immuno modulating action, anti inflammatory action and Antipyretic.

CONCLUSION

One should avoid over medication and Pseudo medication while treating a patient of liver disorders. Different awareness programme should be performed about avoiding self medications by the patients of liver diseases. Patient In the management of these patients herbal preparations are very much effective. *Ayurvedic* herbal preparations have many advantages like Shortening of disease period, Early regeneration of liver parenchymal cells, Avoid post hepatitis residual symptoms and avoid complications such as Cirrhosis, Hepato cellular Carcinoma and Hepatic Encephalopathy. So Many research works had been conducted all over the Country on different diseases and parameters, as described above. However further work can be continued on different parameters.

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