THE HEALER
International Journal of Ayurveda & Intregrative Medicine
www.thehealerjournal.org

Case Report

Alcoholic Liver Disease: An Intergrated Approach - Case Study

Dr. Hari Sharan Aryal,[1] Rama Bhandari,[2] Dr. Saroj Panthi,[3] Dr. Kirti Kumar Raut, [3] Dr. Sanju Bhusal[3]

1 Consultant Physician, Ayurveda Hospital Nardevi, 2 MPHN, I.O.M, T.U, 3 Intern doctor, Ayurveda Campus & Teaching Hospital, I.O.M, T.U. Kathmandu Nepal

Abstract

Liver, the largest organ of human body, is located in the right upper quadrant of abdomen. Deterioration of liver function markers with inflammation is hepatitis. Deterioration of liver function induced by alcohol is termed under alcoholic liver disease. Liver diseases are progressive in nature and require utmost care and support. Present case was studied and aimed to evaluate efficacy of Ayurveda principle and allopathic principles in a combined way to ease the liver function and bring back to normalcy. In this case, a 50 yrs. old male patient presented to Kayachikitsa OPD of Ayurveda Chikitsalaya Nardevi with the complain of yellowish discoloration of eyes associated with loss of sleep and itching. Management was done following thorough history taking, careful clinical examination, laboratory investigation, diet and drug adjustment. Under principles of ayurveda and allopathy, virechana and gut sterility, Guduchi, Rohitkyadi and Punarnawa, Liv 52 DS, Livoluk, Zanocalm, Pantoprazole, Rifaximin, Thiamine was prescribed. Treatment showed remarkable improvement in liver function in 1 week medication and normalcy of LFT was attained upon 137th day of medication.

Keywords: Liver, Alcoholic liver disease, Virechana, Gut sterilization, Ayurveda, Allopath

INTRODUCTION

Liver, the largest organ of human body, is located in right upper quadrant of abdomen, beneath diaphragm, intraperitoneally between 5th intercostal space up to the lower border of 11th ribs anteriorly and T9 to T12 and L1 posteriorly.[1] Inflammation of liver cells by any cause resulting in elevated liver function markers is known as hepatitis. If this lasts less than 6 months, it is called acute hepatitis and if longer than 6 months then termed as chronic hepatitis[2].Deterioration of liver function induced by alcohol is termed under alcoholic liver disease.[3,4]

Access the article online

Quick Responde Code

www.thehealerjournal.org

DOI:

10.51649/healer.161

***Corresponding Author:**

Dr. Hari Sharan Aryal,

M.D Kayachikitsa, Consultant Physician, Ayurveda Hospital Nardevi

E-mail: harisharanaryal@gmail.com

Submitted: 03.07.2023 Received: 09.08.2023
Revised: 11.09.2023 Accepted: 25.09.2023

MATERIALS AND METHODS

Case Report

A 50 yr old male patient had presented to Kayachikitsa OPD of Ayurveda Chikitsalaya Nardevi.

CHIEF COMPLAINT

Yellowish discoloration of eyes for 15 days,

HISTORY OF PRESENT ILLNESS

The patient was apparently well 15 days back, when he developed yellowish discoloration of eyes which was sudden in onset and progressive in nature. Discoloration was preceded by pain over abdomen 6 days earlier for which he had visited the emergency unit in Patan Hospital, provisional diagnosis of symptomatic cholelithiasis / acute pancreatitis was established, investigations were done and managed accordingly with Cefixime, Ondem, Pantoprazole, Tone and Lactulose. Patient gives history of progressive weight loss from 84 kg to 76 kg within 3 months of duration. History of fatigue, loss of sleep and itching preceding the discoloration is present. There is no any history of fever, chills and rigor. There was no significant improvement in symptoms. Later, he visited Kaya Chikitsa OPD of Ayurveda Chikitsalaya, Naradevi and was admitted under Dr. Hari Sharan Aryal with ACN No. 65184 for further evaluation and management **PERSONAL HISTORY Bowel-**

Colour: Previously blackish discoloration, now normal

Consistency: loose (under lactulose), non-sticky

Frequency: 3-4 times/day,

Absence of pus, mucus, worms and undigested food particles

Bladder- Colour:
Yellowish

Normal in frequency and odour. Absence of nocturia, turbidity and particles.

Appetite- Loss of appetite, reduced intake

Sleep- Decreased

Addiction- Regular intake of alcohol

(Type -Local alcohol

Percentage alcohol – 42%

Amount – 100ml

Duration -10 yrs.

CAGE Questionnaire– 4) **Allergy** – No known history of allergy against dust, drug or diet.

Occupation- Shopkeeper

EXAMINATION General Examination General Appearance- Ill looking **General Body built-** Average **General Personality-** Extrovert **General Condition**

- Solid: Height- 5'8"

  Weight – 76 kg

  BMI – 25kg/m square
- Liquid – Dehydration absent
- Mental component – Oriented to time, place and person

Pallor- Absent **Icterus-** Present **Cyanosis –** Absent **Clubbing –** Absent

Glands- Lymph nodes non palpable, Thyroid normal

Oedema – Bilateral Pedal Oedema; Pitting

Joints, Gait, Hair – Normal **Skin –** Dry

Nail- Yellowish discoloration of nail bed **Pulse** – 80 bpm as measured in rt. radial artery, regularly regular, Normal in volume **Temperature** – 98 F **Blood Pressure** – 130/ 80 mm of Hg as measured in right arm by auscultatory method in sitting position. Respiration - rate-18/min

Rhythm-regular

Type-abdomino thoracic

Systemic Examination Gastro Intestinal Mouth, Tongue, Pharynx - Normal **Abdomen**

Inspection – Dry skin around umbilicus, yellowish discoloration, distention of abdomen with engorged veins.

All quadrants moving equally with respiration. **Palpation –**Non-tender and afebrile. **Percussion**- Resonant in center, dull at periphery, Presence of fluid thrills and shifting dullness. **Respiratory System**

Nose- Normal Chest

Inspection – Bilaterally symmetrical, elliptical shape, trachea central in position, abdominothoracic type of movement. **Palpation –** Afebrile, Non-tender, Apex beat palpable at normal position **Percussion** – Resonance in lung field, dull in cardiac field

Auscultation – Bilateral equal air entry, Normal vesico-bronchial sound, no added sound. **Cardio-Vascular System –** S1S2M0

Musculo-skeletal system – Grossly intact **Nervous system –** Grossly intact

Astavidha Pariksha

1.	Nadi(Pulse)	80/min, rhythmic, regularly regular PittaKaphaja
2.	Mutra(urine)	Yellowish
3.	Mala(Stool)	Loose in consistency, 3- 4 times/day, Non-sticky
4.	Jihva(Tongue)	Amaja (Yellowish white)
5.	Shabda(Sound)	NVBS, S1S2M0, spastha vaak
6.	Sparsha(touch)	Samasheetata
7.	Drika(eye)	Yellowish
8.	Aakriti(built)	Madhyam

PROVISIONAL DIAGNOSIS – Alcoholic Liver Disease

INVESTIGATION

Date	Investigation	Impression
2079/11/14 PAHS	USG (Abdomen + Pelvis)	Adenomyosis (Fundal type) of GB Hepatomegaly with periportal cuffingv/o hepatitis Slightly bulky pancreas
	Serology	Negative for Hepatitis E, HAV, HBsAg and HCV
	CBC	Hb 13.0 gm/dl, WBC 8250/microlitre DC N84,L13,E2,M1,B 0%

		Platelets- 273000 MCV-89.5fl, MCHC-34.2%, MCH- 30.6pg, PCV-38.0%, RBC-4.24 million/microlitre
	LFT	TB-8.2mg/dl, DB-3.8 mg/dl, SGPT-361 IU/L, SGOT-179IU/L, ALP-208 IU/L,
	PT/INR	15.2/1.09
2079/11/29	LFT	TB-22.0mg/dl, DB-12.6 mg/dl, SGPT-180 IU/L, SGOT-48IU/L, ALP-315 IU/L, TP-7.1gm/dl, Albumin-3.0 gm/dl GGT-43 U/L

DIAGNOSIS Alcoholic Liver Disease

MANAGEMENT OF THE CONDITION

2079/11/29

Drug	**Dose**
Mixture of Guduchi churna, Rohitkyadi churna, Punarnawa churna (1:1:1)	**1tsf *PO*** **BD*AF**
Tab. Liv 52 DS	2 tab*BD*AF
Syp Livoluk(Lactulose)	2oml*HS
Tab Tone(Thiamine) 100mg	1 tab*BD*AF
Tab Rifaximin 550mg	1 tab*OD for 5 days
Cap. Zanocalm	2cap *HS
Tab. Pantop	40mg 1tab*OD for 5 days

2079/12/08

Syp. Amyron	2tsf* BD* AF*6wks
Syp. Fortiplex	2tsf* BD* AF*6wks

Observation Blood tests during course of treatment CBC

	Hb		DC	Platelets	PCV/RBC Count
079/11/29 (1st day)	13		84/ 13/ 2/1/ 0	000	38/4.24
12/08 (10th D)	12.2		77/ 18/ 3/2/ 0	000	35.1/3.93
12/13 (15th D)	12.5		78/ 18/ 2/2/ 0	000	36.6/4.01
12/28 (30th D)	12.6		69/ 23/ 5/3/ 0	000	38.2/4.10
2080/02/09 (72nd D)	12.3		62/ 34/ 2/2/ 0	000	41.0/4.20
02/30 (93rd D)	13.3		63/ 32/ 3/2	000	40/4.4
3/28 (123rd D)	12.6		62/ 32/ 3/3/ 0	000	37/4.2
04/12 (137th D)	13.5		52/ 41/ 4/3/ 0	000	40/4.3

12/28 (30th D)	5.1/2.7	88/97	301	7.4	3.3
2080/2/9 (72nd D)	2.5/1.8	61/64	384	7.4	3.9
02/30 (93rd D)	6.4/2.9	48/55	510	7.1	3.6
3/28 (123rd D)	1.6/0.4	84/75	496	7.2	3.8
4/12 (137th D)	1.2/0.2	69/55	634	7.4	3.8

79/11/14	Adenomyosis (Fundal type) of GB Hepatomegaly with periportal cuffing-v/o hepatitis Slightly bulky pancreas

DISCUSSION

Aacharya Charak in Charak Samhita, Chikitsa sthan has advised, "Kamali tu virechanaih". Thus, Livoluk as a mild laxative was used as a safer type during weak GI mucosa beside having lots of laxative drugs available in ayurveda[5]. Thiamine was used as a support for metabolic activities[6]. Rifaximin as a gut sterilizer and as a non-overloading liver for metabolism a non-absorbable antibiotic was used[7]. Liv 52 DS have been proven hepatoprotective and anti-viral hepatic infection patent ayurveda drug[8]. Guduchi (Tinospora cordifolia) have been proven to reduce levels of GGT, AST, ALT, TG, cholesterol and increase excretion of biotin, LFT xanthine, vit D2 and 2-o-p-coumaroyltartronic acid, thus can be said hepatocellular protective drug that re-establishes

	Bilirubin(T/D)	SGPT/SGOT	ALP	Total Protein	Albumin
079/11/29 (1st)	22/12.6	180/48	315	7.1	3.0
12/08 (10th)	14.1/7.8	39/37	344	7.2	3.0
12/13 (15th)	15.5/7.2	41/56	368	7.2	3.0

Fortiplex was used to maintain constant RBC production and hemoglobin maintenance. Under 3 weeks of medication pt felt symptomatically good and so was observed on lab investigations, on tri weekly assessment results were significant satisfactory seeing the decrement in liver enzymes and increment in hepatic production. After a 3rd month 13 days medicine was completely discontinued on normal values of LFT, however CECT was advised for constant raise of Alkaline Phosphatase.

Rohitkyadi churna

S.no.	Ingredients
1.	Rohitaka(*Rhododendron arboretum* Sm.)
2.	Katuka(*Picrorhiza scrofularieaeflora* Pennell)
3.	Kiratatikta(*Swertia chirata* Buch, Ham)
4	Musta(*Cyperus rotundus* Linn.)
5.	Shunthi(*Zingiber officinale* Rosc.)
6.	Ativisha(*Aconitum heterophyllum* Wall)
7.	Yavakshara(Alkali from *Hordeum valgare* Linn.)

LIV 52 DS

S.no.	Ingredients
1.	Himsra (*Capparis spinosa*)
2.	Kasani (*Cichorium intybus*)
3.	Mandur Bhasma
4	Kakamachi (*Solanum nigrum*)
5.	Arjuna (*Terminalia arjuna*)
6.	Kasamarda (*Cassia occidentalis*)
7.	Biranjasipha (*Achillea millefolium*)
8.	Jhavuka (*Tamarix gallica*)
9.	Processed In: Bhringaraja (*Eclipta alba*), Bhumyaamlaki (*Phyllanthus amarus*), Punarnava (*Boerhaavia diffusa*), Guduchi (*Tinospora cordifolia*), Daruharidra (*Berberis aristata*), Mulak (*Raphanus sativus*), Amalaki (*Emblica officinalis*), Chitraka (*Plumbago zeylanica*), Vidanga (*Embelia ribes*), Haritaki *(Terminalia chebula*), Parpata (*Fumaria officinalis*)

hepatic functions[9] was used along with Punarnava churna(*Boerhavia diffusa)*, an anti-inflammatory drug with regenerative function[10] . Since this is a pittaja disease thus to wash out bile and pitta from body as well as reestablish hepatocellular[11] functions above 2 were mixed along with rohitkyadi churna[12]. Syp. amyron and a complementary

CONCLUSION

Alcoholic liver disease was successfully managed by medicines from ayurveda system and allopath system. Being under the guidance of ayurveda shastra, medication plan and strategy were applied which significantly improved LFT markers and eased the patient from earlier days. This study shows a roadmap can be built for treatment of ALD with ayurveda preserving the potency of ayurveda diets, medicines assisted along with few allopath medicines. Though this study is just one of many 100s of successful ALD, CLD cases with sole ayurveda approach and some integrated approach, still documentation and larger sampling is always a necessity to reestablish the efficacy of medicines mentioned for Yakrit vikar.

ACKNOWLEDGEMENTS: Not Applicable

CONFLICT OF INTEREST: Author declares that there is no conflict of interest.

SOURCE OF SUPPORT: None

REFERENCES

1. GRAY, HENRY. *Gray's Anatomy*. ARCTURUS PUBLISHING LTD, 2023.
2. Timothy J. Schaefer; Savio John, Chronic Liver Disease, Treasure Island (FL): StatPearls Publishing; 2023 Jan https://www.ncbi.nlm.nih.gov/books/NBK5 51570/
3. Roshan Patel; Matthew Mueller.,Alcoholic Liver Disease, Treasure Island (FL): StatPearls Publishing; 2023 Jan https://www.ncbi.nlm.nih.gov/books/

NBK546632/

4. Samiran Mukherjee; Savio John., Lactulose, Treasure Island (FL): StatPearls Publishing; 2022 July https://www.ncbi.nlm.nih.gov/books/NBK536930/

5. Dr. Brahmananda Tripathi, Charak Samhita Volume 2, Reprint Chaukhambha Surbharati Prakashan, Varanasi, Ch. Chi., 2020; 16/39-40

6. Kril, J.J. The contribution of alcohol, thiamine deficiency and cirrhosis of the liver to cerebral cortical damage in alcoholics. *Metab Brain Dis* **10**, 9–16 (1995).

7. Shayto RH, Abou Mrad R, Sharara AI. Use of rifaximin in gastrointestinal and liver diseases. World J Gastroenterol 2016; 22(29): 6638-6651

8. SV Dange, Abhijit Nikam, Mangesh Kamale., Evaluation of Efficacy and Safety of Liv.52 Tablet in Acute Alcoholic Hepatitis: An Open Clinical Study., Indian Journal of Clinical Practice, Vol. 22, No. 7, December 2011,325-329

9. Bhawana Sharma , Rajesh Dabur, Protective Effects of *Tinospora cordifolia* on Hepatic and Gastrointestinal Toxicity Induced by Chronic and Moderate Alcoholism, *Alcohol and Alcoholism*, Volume 51, Issue 1, 1 January 2016, Pages 1–10, https://doi.org/10.1093/alcalc/agv130

10. A.K.S. Rawat, S. Mehrotra, S.C. Tripathi, U. Shome, Hepatoprotective activity of Boerhaavia diffusa L. roots — a popular Indian ethnomedicine, Journal of Ethnopharmacology, Volume 56, Issue 1, 1997, Pages 61-66,

11. Liu YL, Lin LC, Tung YT, Ho ST, Chen YL, Lin CC, Wu JH. *Rhododendron oldhamii* leaf extract improves fatty liver syndrome by increasing lipid oxidation and decreasing the lipogenesis pathway in mice. Int J Med Sci. 2017 Jul 19;14(9):862-870.

12. Sapna N. Shetty, Sushma Mengi, Rama Vaidya, and Ashok D. B. Vaidya, A study of standardized extracts of P*icrorhiza kurroa* Royle ex Benth in experimental nonalcoholic fatty liver disease, J Ayurveda Integr Med. 2010 Jul-Sep; 1(3): 203–210. doi: 10.4103/0975-9476.72622

How to cite this article:

Aryal HS, Bhandari R, Panthi S, Raut KK, Bhusal S, Alcoholic Liver Disease: An Integrated Approach – Case Study, The Healer Journal, 2023;4(1):111-117.