



EFFECT OF VIRECHANA AS A PANCHAKARMA THERAPY IN REDUCING SGOT SGPT LEVEL – A CASE STUDY

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ABSTRACT

The liver is a vital organ responsible for detoxification, metabolism, and nutrient storage. Elevated levels of serum glutamic-pyruvic transaminase (SGPT) and serum glutamic-oxaloacetic transaminase (SGOT) are biomarkers indicating liver damage. These enzymes are released into the bloodstream when liver cells are injured, often due to conditions such as hepatitis, alcohol abuse, or fatty liver disease. Persistent elevation of SGPT and SGOT levels can signify ongoing liver injury, leading to fibrosis, cirrhosis, or liver failure if untreated. Early detection and management of elevated enzyme levels are crucial for preventing severe liver damage and maintaining overall health. In Ayurveda, the liver is a crucial organ, known as "*Yakrit*," which act as a moola sthana for *raktha vaha srotas*. It is pivotal in balancing the *doshas-Vata*, *Pitha*, and *Kapha*. Liver disorders are often linked to *yakrith vikara* with *pitha* as main dosha which get imbalanced. *Virechana*, a therapeutic purgation process, is a key treatment in ayurveda for *pitta* vitiation or *pitta kapha samsrushta dosha*. It involves the use of purgative herbs to cleanse and eliminate toxins from the liver and gastrointestinal tract, restoring *doshic* balance. *Virechana* not only detoxifies the liver but also enhances digestion and overall vitality, highlighting its importance in maintaining health.

Key words : Virechana, SGOT, SGPT

INTRODUCTION

Liver is one of the most important organs of the body. Its primary function is detoxification, metabolism of fat, carbohydrates and protein, hormones, stable blood sugar level, formation of ketones and aiding digestion. Fatty liver, liver cirrhosis and other liver diseases are quite common these days. When the liver gets damaged or injured or if it produces excess enzymes then the level of SGOT and SGPT become elevated. Elevated SGOT and SGPT level indicates potential damage or dysfunction of liver. The underlying causes of liver damage include;

1. Alcohol Abuse

Excess consumption of alcohol causes liver damage. Alcoholic liver disease occurs after years of heavy drinking. With time scarring and cirrhosis can occur. Liver cirrhosis is the final stage of alcoholic liver disease. Due to damage to the liver level of SGOT and SGPT in blood increases.

2. Fatty Liver

Fatty liver is a condition when extra fat is deposited in the liver. It can be Two Types

a) Non-alcoholic fatty liver disease

- b) Alcohol-related fatty liver disease (ALD).

3. Hepatitis

Hepatitis A, hepatitis B, hepatitis C, alcoholic hepatitis and auto-immune hepatitis. Hepatitis can cause inflammation of the liver and result in high ALT and AST.

4. Liver Cirrhosis

Cirrhosis is an end-stage liver disease which causes abnormal functioning of the liver. It is caused by the formation of scar tissue known as fibrosis which causes permanent damage to the liver.

5. Medications

Few medicines and prolonged use of antibiotics, statins (medicine to reduce cholesterol) and analgesic (pain killer) causes hepatotoxicity which causes liver damage and high levels of SGOT and SGPT.

6. Other factors which cause increase in level of SGOT and SGPT

Heart attack, Diabetes, Inflammation of gallbladder, Obesity, Celiac disease, Hemolysis, Polymyositis, Cancer.

High SGPT and SGOT level indicates various complications in the body. Some expected complications are jaundice, vomiting and nausea, swelling in legs, breathlessness, fatigue etc.

Treatment depends on the underlying cause of elevated SGOT and SGPT level. Physicians can treat by two means either medication or liver transplant. Medicinal treatment in case of viral illness like hepatitis or Wilson's disease. In case of permanent damage, liver transplant is recommended.

In ayurveda all liver diseases can be dealt under *Udara roga* with specific references to *Pittodara* and *Yakrithodara*. The generalised cause for all rogas especially udara roga are considered to be *mandagni*¹ or deranged agni which has to be made into *samagni* with proper *shodhana chikitsa*. According to *acharya Yakrith* is the moolasthan of *Rakta vaha srotas*² and is the place for *Ranjaka pitha* also. Therefore, it can be considered as a *Pitha sthana vikara* with *anubandha dosha*. Based on these, proper shodhana aiming for *pitha* correction has to be selected to correct the dearranged *pitha* and *agni*. Also, while dealing with indications of *panchakarma* therapy acharyas clearly mention about *virechana* to be done in *pithaja* and *pitha samsrushta vyadhi*³. In *Udara chikitsa Vagbhata* acharya clearly mention about the importance of *nitya virechana*⁴. Considering above criterias *Virechana* as main *shodhana* therapy can be done in *Yakrit vikaras*. So *Virechana karma* emerges as a potentially effective therapeutic approach for *Yakrith vikara*.

CASE REPORT

A male patient of 36 years of age with N/K/C/O DM and HTN came to OP with generalised weakness, swelling in legs, occasional numbness in b/l leg, and severe low back pain. After detailed history taking blood investigation was given, in which there is marked increase in SGOT and SGPT level. It was noted that the SGOT level were 133 IU/L and SGPT was around 290 IU/L. Based on these reports it was diagnosed as *yakrith vikara* and *rooksha Virechana* was done with *Avipathy Choornam*⁵.

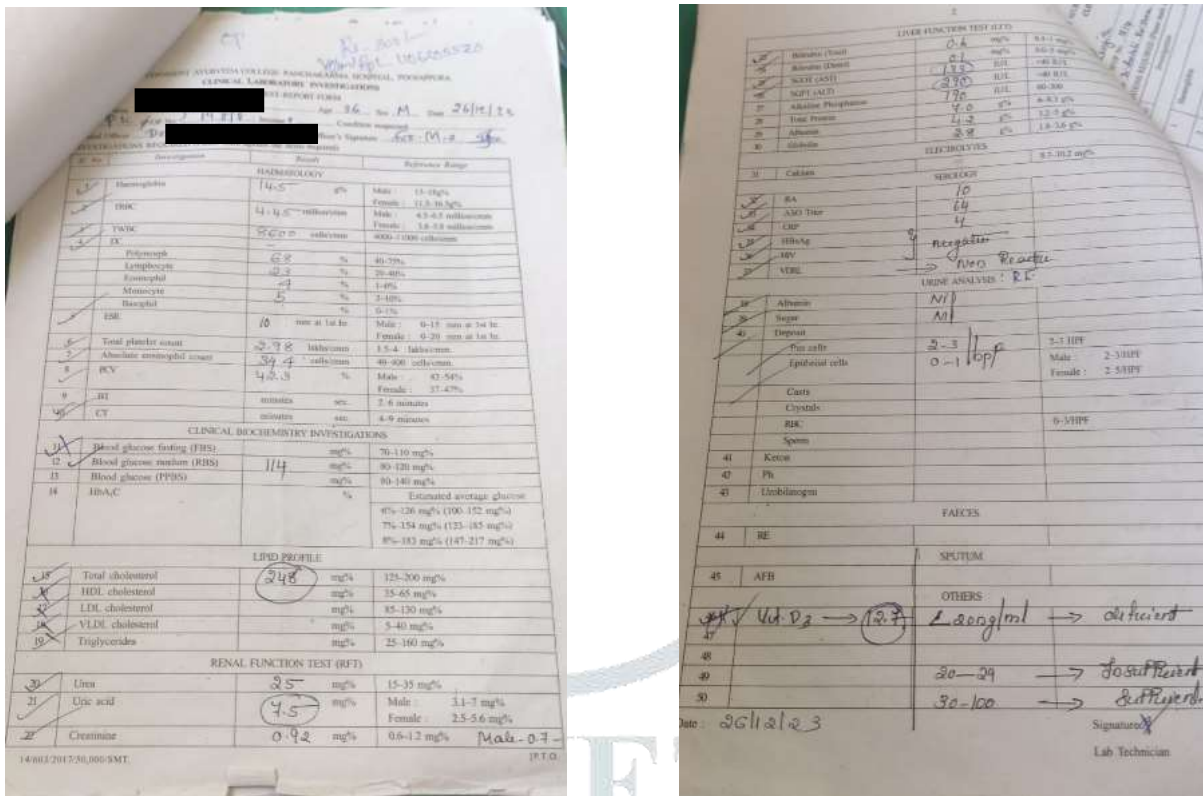


Table 1: Showing Treatment Schedule

Deepana Pachana	Snehapana	Visrama kala – 3-day Abhyanga Sweda	Procedure	Samsarjana Karma
Amrithotharam Kasayam, Shaddharanam Choornam. (7 days)	Moorchita Ghritam (5 days)	Chinchadhi tailam, Ooshma swedam	Virechana with Avipathy Choornam 30 gm at 8am along with draksha swarasa.	For 5 days

Table 2: Showing Virechana Karma

Sl.No	Drug	Time Of Administration	No of Vegas	Time of appetite	Time of food Intake
1	Avipathy choornam 30gm in morning with draksha swarasa.	8am	16	2pm	2:10pm

Table 3: Showing Objective Criteria Before and After Treatment

	Before Treatment	After Treatment
SGOT	133 IU/L	58 IU/L
SGPT	290 IU/L	143 IU/L

LIVER FUNCTION TEST (LFT)			
25	Bilirubin (Total)	0.4	mg/dL
26	Bilirubin (Direct)	0.1	mg/dL
27	SGOT (AST)	58	U/L
28	SGPT (ALT)	149	U/L
29	Alkaline Phosphatase	149	U/L
30	Total Protein	6.5	g/dL
31	Albumin	4.0	g/dL
32	Globulin	2.5	g/dL
ELECTROLYTES			
33	Calcium		8.7-10.2 mg/dL
SEROLOGY			
34	RA		
35	ASO Titer		
36	CRP		
37	HBsAg		
38	HIV		
39	VDRL		
URINE ANALYSIS			
40	Albumin		
41	Sugar		
42	Deposit		
43	Pos cells		2-3 HPE
44	Epithelial cells		Male : Female :

DISCUSSION

Liver disorders are increasingly becoming a significant health concern globally, with elevated levels of liver enzymes such as SGOT (Serum Glutamic Oxaloacetic Transaminase) and SGPT (Serum Glutamic Pyruvic Transaminase) being common indicators of hepatic dysfunction. These enzymes, also known as AST (Aspartate Aminotransferase) and ALT (Alanine Aminotransferase) respectively, are crucial for diagnosing liver conditions, as their elevated levels often signal liver damage or inflammation. In ayurveda liver disorders can be considered as *Yakrith vikara* with its symptoms resembling *pittodara* and *yakrithodara* in nature. Since it's a *pitha sthanagata vyadhi* occurring due to dearranged *agni* specific panchakarma treatment like *virechana* with *Avipathy choorna* played an important role in reducing the SGPT and SGOT level here. *Virechana* drugs carry out the therapeutic purgation due to their *Prabhava*⁶(potency). As these drugs are having *Jala* and *Prithvi Mahabhuta* dominancy, they have a natural tendency to go downward and thus they can help in induction of purgation. In addition to correcting *pitha virechana* also help in attaining the *samagni* state there by help in achieving the proper metabolism of body. Benefits of *virechana* with *Avipathy choornam* are:

Detoxification: *Virechana* helps in the elimination of toxins from the liver and bloodstream, thereby reducing the load on the liver and promoting its healing.

Anti-inflammatory Effects: The herbs in *Avipathy Choornam*, especially Triphala, have potent anti-inflammatory properties that help in reducing liver inflammation, thus normalizing enzyme levels.

Balancing Pitta: By pacifying the *Pitta dosha*, *Virechana* helps stabilize the metabolic processes governed by the liver.

CONCLUSION

Virechana with *Avipathy Choornam* offers a promising Ayurvedic intervention for managing liver disorders characterized by elevated SGOT and SGPT levels. By leveraging the detoxifying and anti-inflammatory properties of *Avipathy Choornam*, this therapy helps in restoring liver health and normalizing enzyme levels. While these findings are encouraging, further large-scale clinical studies are necessary to validate these outcomes and integrate this therapy into broader clinical practice. The holistic approach of Ayurveda, focusing on balance and natural healing, continues to provide valuable insights and alternatives for modern medical challenges.

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