CASE STUDY

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A Case Report on Ascites (Jalodar) Caused by Cryptogenic Liver Cirrhosis

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Abstract

Ascites or *Jalodar* is the most common decompensating event in cirrhosis. The standard modern treatments generally provide provisional relief with time dependent reoccurrence of disease due to permanent damage of hepatic paryenchyme which may finally require liver transplantation. A 30 year old female patient approached with grade II ascites with bilateral pedal edema (++). She was subjected to treatment involving ayurvedic drugs in specific dosing pattern with restricted diet plan for one year. This case report demonstrated the successful treatment of grade II ascitis due to cryptogenic liver cirrhosis with hepatorenal syndrome.

Keywords

Ascites, Jalodar, Cryptogenic liver cirrhosis, Ayurvedic drugs



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INTRODUCTION

Ascites has been considered the free fluid within the peritoneal cavity¹. The cause of fluid accumulation is a result of various conditions directly involving the peritoneum (tuberculosis, malignancy), or diseases remote from the peritoneum (liver disease, heart failure, hypoproteinaemia). Majority (75%) of ascites patients suffered from liver cirrhosis² caused mainly by excessive alcohol intake³. But in non-alcoholic patients exact cause of disease is not identified which termed as 'cryptogenic causing cirrhosis,4 liver-related morbidity and mortality. Nonalcoholic fatty liver disease⁵ (NAFLD) is recognized as one of the most probable and common cause of cryptogenic cirrhosis. NAFLD is suspected when USG or other imaging studies shows fatty liver with elevation in liver enzymes ALT, AST. Aacharya Charak told that both medicinal and surgical treatment can treat jalodar⁶ which is similar to ascites. The management of Jalodar involves nitya virechan⁷ (daily purgation), and drugs should have deepan, kaphnasak, balprapti, balsthirita, and yakrut uttezak properties⁸. So pippalivardhman rasayan⁹ with other drugs arogyavardhini like vati. punarnavastak kwath, phaltrikadi kwath,

trinpanchmool kwath, tamra sindoor, and jalodrari ras with restricted diet plan¹⁰ for one year were used in the treatment of jalodar. The drugs along with restricted diet plan are the key management of jalodar. This paper shows successful result in treatment of a complicated grade II ascitis due to cryptogenic liver cirrhosis with hepatorenal syndrome.

CASE REPORT

A 30 year old female patient approached with chief complain of huge abdominal distention, swelling of lower limbs, fatigue, malaise, nausea and intermittent episode of vomiting, and difficulty in breathing. She was suffering from all these symptoms since two months.

History of present illness

The patient was asymptomatic before four months then she suddenly developed fever with chills and rigor ache and pain all over the body and this episode of relapses and remission occurs up to initial two months. In last two months she started feeling her abdomen is distending gradually and swelling of both lower limb appears.

Past History: No history of TB, DM, HTN, Hypothyroidism, any surgery, chronic illness.

Personal History: Decreased appetite, house wife, vegetarian, no alcoholic addiction,

Family History: Not relevance detail found. **Physical Examination:**

B/L pitting pedal edema (++), mild pallor, No icterus, Temp: 99 F, BP- 112/68 mm hg, **Systematic examination** (GIT)

Inspection: distended abdomen, Palpation: No any mass or lump felt over the abdomen; Percussion: Shifting dullness and fluid thrill was present.

Other systematic examination were within normal limit

Relevant Investigations

MRI Upper abdomen + MRCP: Moderate ascitis, mild to moderate hepatomegaly with coarse signal intensity, diffused fatty infiltration with irregular outline & prominent left lobe, no IHBR dilation, portal vein is normal in course and caliber. CBD is of normal caliber no intra luminal filling defect or extensive pressure effect. Main pancreatic duct not dilated.

LFT: AST-64 U/L, ALT-39 U/L, GGTP-105U/L,ALKP-253 U/L,Total Billirubin-0.40 mg/dl, Total Protein-3.90 g /dl, Albumin-1.29 g/dl, A:G Ratio- 0.49

CBC: Hb-8.40 g/dl, TLC& DLC: no significant change

RFT: Serum creatinine-2.45 mg/dl

Urine R/M: Proteins present 1+ (30 mg/dl)

and 24 hr urine protein: 0.43 g/dl

Hepatitis Profile: HBS Ag- Negative, Hepatitis A & Hepatitis C antibodies – WNL

Lipid profile: HDL Chol – 31 mg/dl, Rest lipids - WNL

ADA:62.2 IU/L

Quantiferon TB Gold: Negative

Differential Diagnosis:

Based on physical examination and investigation, it is deduced that this is case of cryptogenic liver cirrhosis which may be caused by NAFLD and the patient was in the condition of hepatorenal syndrome, after excluding tuberculosis causes, renal causes, and hepatitis A, B, C.

TREATMENT PLAN

It involves *pippali vardhman* pattern along with other drugs and diet regime.

Adopted *Pippali Vardhman pattern* (for one year):

For first Six month: The implemented pattern for *pippali vardhman* in *ksheerpak* was as follows:

1. First three Months: The dose was started with two *pippali*. Then dose was increased from two *pippali* to seven *pippali* with

adding one more *pippali* per fifteen days for three months.

- 2. Next two Months: At the starting of fourth month, one more *pippali* was added per seven days which finally led to fifteen *pippali*.
- 3. Last one Month: Now this dose was tapered from fifteen *pippali* to two *pippali* with one *pippali* reduction per two days.

Time Lag: *Pippali* was not given for twenty days

Next Six Months: Repeat the same dosing pattern as followed above for first six months.

Other Drugs:

Punarnavastak kwath, phaltrikadi kwath, trinpanchmool kwath, swet parpati, yavkahar, arogyavardhini vati, tamra sindoor, prawal pisti, jalodrari ras and punarnava mandoor

Diet Regime:

Patient was kept on only cow milk for initially six months then in next three months she was given cow milk with $peya^{11}$ and in last three months she was again kept on cow milk with kodo, $sava\ bhat^{10}$. For entire one year she was not allowed to take water and salt.

RESULTS AND OBSERVATION

All the hematological and radiological finding was normal within six months. Also Pedal edema disappeared within six months. The measurement for abdomen girth and midpoint between knee & ankle were taken before and after treatment are given in table 1.

DISCUSSION

The treatment involves fluid elimination from peritoneal cavity simultaneously stopping the process of fluid formation along with recovery of liver cells. As Acharaya Charak told fluid elimination by nityamevvirechatye in jalodar and also explained the dose dependent rasayan activity of *pippali* (*pippalivardhman*). Pippaliis hepatoprotective it also reduces fat in liver parenchyma, normalizes the hepatic enzymes, regenerate liver cells and reduces the liver fibrosis¹¹. Therefore, the treatment of the patient was done in same line as discussed above. The adopted vardhanman pattern was started with two pippali leading to 5-6 loose watery stool (purgation) per day and this dose continued till the frequency of stool sustained 1-2 per day. Then one more pippali was added in previous dosing. This pattern continued till 15 pippali at which patient started feeling discomfort like

burning sensation in abdomen and dryness of mouth. After this the dose was tapered as per treatment plan. Along with pippali other drugs like punarnavastak kwath, phaltrikadi kwath, trinpanchmool kwath, swetparpati, jalodrari and yavkahar were given till the creatinine level reaches normal limit. Then after arogyavardhini vati, tamra sindoor, prawal pisti, punarnava mandoor, jalodrari ras were added till all haematological and radiological finding becomes normal including pedal edema. This treatment took almost 6 months for complete relief. Then for next six months *pippalivardhman* pattern was repeated along with *punarnavastak* kwath, phaltrikadi kwath, arogyavardhini vati, and punarnava mandoor for first three months and in last three months only punarnavastak kwath and phaltrikadi kwath were given. Using above drugs, pippali dose pattern & diet plan, patient responded outstandingly after three months and complete relief in symptoms was ensured in initial six months witnessing normal relevant investigations. The drugs were clubbed with the continued diet plan (as suggested by Acharaya Charka for one year in jalodar) to avoid the reoccurrence of the diseases.

Table 1 Showing the physical measurements of abdomen girth and midpoint between the knee and ankle

| Date | Girth of abdomen at three fingers from umbilicus (in cm) | | Midpoint between the Knee and Ankle (in cm) | |
|--------------------|--|-------|--|-------|
| | Above | Below | Left | Right |
| 10.06.15 | | | | |
| (before treatment) | 111.5 | 101 | 33 | 32.5 |
| 24.06.15 | 110 | 100 | 33 | 32.5 |
| 07.07.15 | 109 | 99 | 32.5 | 32 |
| 21.07.15 | 106 | 97 | 32 | 31.5 |
| 01.08.15 | 101 | 92 | 31.5 | 31 |
| 07.08.15 | 92 | 86 | 30 | 29.5 |
| 24.08.15 | 87.5 | 84 | 29.2 | 28.5 |
| 07.09.15 | 76 | 81 | 28 | 27.6 |
| 22.09.15 | 72 | 79 | 27 | 26.5 |
| 06.10.15 | 71 | 78 | 26 | 25.5 |
| 20.10.15 | 70 | 76 | 25 | 24 |
| 05.11.15 | 70 | 74 | 24 | 23.5 |
| 20.11.15 | 70 | 74 | 24 | 23.5 |

CONCLUSION

In Ayurveda, *Jalodar* has been considered one of the critical diseases whose treatment require time bound strict drugs and diet

management. This patient, had approached with moderate ascites, was treated using ayurvedic principle of management which not only recovered her from ascites but also

worked on avoiding recurrence of the ascites. In *Jalodar* (Ascites) strategic use of *pippalivardhman rasayan*, other ayurvedic drugs, and strict diet plan is found to be most effective treatment.

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