ORIGINAL RESEARCH PAPER

Ayurveda

AYURVEDIC MANAGEMENT OF *JALODARA* W.S.R. TO ASCITES : A SINGLE CASE STUDY

KEY WORDS: jalodar, ascites, dugdhapan, nitya virechan, arkpatrapattabandhan

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ABSTRACT

The liver is largest solid organ in the body which removes toxins from blood and performs as both exocrine as well as endocrine function. One of the most common manifestations of liver dysfunction is ascites. Ascites is nothing but accumulation of free fluid in peritoneal cavity. Liver cirrhosis due to chronic alcohol consumption is one of the causes of ascites. In spite of many advanced allopathic treatment facilities still there is no sure treatment which gives relief to the patient of ascites.

As per the science of *ayurved* ascites can be correlated with *jalodar*. In the patient of ascites *ayurvedic* treatment gives better relief without any side effects. Certain medicines, diet restriction and surgical procedures are mentioned in *ayurvedic samhita*. Diet plays an important role in management of ascites. Here, a case study of 38 years male patient of *jalodar* with symptoms of anorexia, weakness and *udarvriddhi* etc. is discussed. The *ayurvedic* management of *jalodar* in this case was done by *nidanparivarjan, deepan, srotomargnirodhan, nitya virechan,* etc for 2 months which gives significant result in all symptoms. Hence it is concluded that *ayurvedic* management gives better relief in ascites.

INTRODUCTION –

In the science of *Ayurveda mandagni* is the root cause of most of the diseases[1]. Mainly in the *adhyayas* of *udar* and *grahani* importance of *agni* has specifically mentioned. Due to *mandagni vitiated dosha* cause obstruction to *sweda* and *ambuvaha srotas* at *khavaigunya*[2] which leads to development of *udar*. If causative factors are continued then all types of *udar* ultimately convert into *jalodar*.

Ayurvedic management of *udar* is based upon *nidanparivarjan* (abstain from disease causing factors), *srotomargnirodhan, dipan* and *dosha-dushya sammurchana vighatan* leading to establishment of *swastha avastha*.

Ascites refers to accumulation of free fluid in peritoneal cavity[3].In the contemporary science management of ascites mainly done by treating the cause, fluid and salt restriction, diuretics, abdominal paracentesis in severe distention causing respiratory embarrassment, al

CASE REPORT

A 38 year male came in *KC* OPD of our hospital. It was case of ascites with fullness of abdomen,bilateral pedal edema,loss of apetite,weakness since one month and had taken treatment for same but not got relief. Since 8 days symptoms increased gradually. So Patient approached hospital for *ayurvedic* treatment. For better management patient was admitted in our KC department.

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C/O-

1. *Agnimandya* (anorexia) } since 1 month
2. *Dourbalyanubhuti* (weakness) since 1 month
3. *Udarvruddhi, shoola,gourav* (increased girth of abdomen withheaviness,pain) since 8 days } since 8 days
4. *Pitvarni netra, twak* (yellowish discolouration)
5. *Aayasen shwas* (breathlessness)
6. *Kati-prushtha shoola* (backache) since 4 days } since 4 days
7. *Padshoth* (pitting pedal edema)

History of past illness– NAD
alcolol addiction since 6 years and tobacco chewing since 3 years.

diwaswap since 1 year

General Examination

Pulse rate -90 /min	BP- 120/90 mm of Hg	
RR -18/min	Temp-97 F	Weight-51 kg
Pallor- present	Icterus –present	

Abdominal Examination-
Inspection- abdominal girth increased, umbilicus displaced downwards, superficial veins are visible and prominent. Skin is blackish yellow color & glossy as compared to other area.
Auscultation - bowel sounds heard.

Palpation – edge of the liver is palpated. No splenic enlargement.

Mild pain after palpation.
Percussion
Shifting and horse shoe dullness present,
Fluid thrill present
Grading of ascites5 - +++ (obvious ascites but not tense)
Systemic examination – NAD

MATERIALS AND METHODS –

Study design – Experimental single case study
Nidanpanchak-
Hetu - alcohol consumption, *diwaswap*

Purvarupa – loss of appetite, weakness, *udarvruddhi, gaurava*
Rupa - udarvruddhi, padshoth, aayasen shwas, katiprushtha shola Samprapti[2]-

Hetusevan
↓
Pranvayu, apanvayu and jatharagni dushti
↓
Swedvaha, udakvaha srotorodh
↓
Sthansanshray between twak and maans of udar causing kukshi aadhman (udarvruddhi)
↓
Development of udar

Therapeutic Intervention
After diagnosing the patient with *jalodar* treatment was planned as *deepan, srotorodh nashak, nitya virechan aoushadhi* along with *dugdhahar* and *arkapatrapatta bandhan*.

Nidanparivarjan– total abstinence from alcohol, tobacco,

gutaka consumption, *Diwaswap*.

Table no.1 Therapeutic intervention

Sr. no.	*Aoushadhi dravya*	*Matra*	*Kala and anupan*	*Kalavadhi*
1	Ativisha *Musta* *Shunthi* *Haritaki*	100 mg 250 mg 250 mg 250 mg	Twice a day with *dugdha*	1st to 15th day
2	*Aarogyavardhini* *daruharidra* *sharpunkha*	500 mg 500 mg 500 mg	Twice a day with *dugdha*	1st to 30th day
3	*Avipattikar churna*	2 gm	*nishakali* with *koshna jala*	1st to 30th day
4	*Suvarna sutshekhar*	250 mg	Twice a day with *madhu*	1st to 30th day
5	*Darvyadi Kashay*	25 ml	Twice a day	3rd day to 17th day
6	*Trivrutta avaleha*	10 gm	with *triphala kashay* in morning	5th day to 30th day
7	*Tapyadi loha* *Punarnava* *Suvarnamakshik*	500 mg 250 mg 125 mg	Twice a day with *koshna jala*	11 th day to 30th day

Combination of *ativisha, musta shunthi* and *haritaki* was given for *aampachan*[6]. *Aarogyavardhini* was given for *deepan, pachan* and *malshodhan*. *Avipattikar churna* for *sanchit pitta nirharan* and *suvrna sutshekhar* for *vatpittashaman, aampachan* and *pitta samyavastha*. *Darvyadi kashay* works as *dosh sanghat vighatak, anulomak, kleda nirharan, virechak* and also work on *ras rakta srotas* by acting as *pittashodhan*, restoring *pitta* to its original *aashay*. *Nitya virechan* is given *with trivurutta avaleha*. Combination of *tapyadi loha, punarnava* and *suvarnamakshik* works on *ras* and *raktavaha srotas*.

OBSERVATION AND RESULT

Daily changes in the measurement are recorded on specific time. Investigations were done. Signs and symptoms were observed, examinations were done. After 17 days there was significant relief in all complaints. The patient was discharged and came for follow up after 17th day. There was no *udarvruddhi, padshoth* and *agnimandya* but yellow discoloration of sclera still present. Patient had no fresh complaints and clinically improved.

Table no.2 Measurements

date	Above 5 cm Of umbillicus	At the leval of umbilicus	Below 5 cm of umbillicus	Xiphi to umbillicus	Umbilicus to pubic symphysis	Weight
30/03	82	86	79	20	14	51 kg
02/04	81	83.5	77	20	14	51 kg
05/04	83	84	77	20	13	50 kg
08/04	79	80	76	19	13	46.2 kg
11/04	76	77	75	19	13	46.9 kg
14/04	73	74.5	75	19	13	44.9 kg
17/04	72.5	72	72.5	19	13	43.9 kg

Table no.3 investigations

Date	24/02/21	30/03/21	13/04/21	06/05/21
1.LFT				
Total sr.bilirubin	6.0 mg/dl	15.9 mg/dl	9.9 mg/dl	5.5 mg/dl
Direct	3.8 mg/dl	7.2 mg/dl	3.8 mg/dl	4.0 mg/dl
Indirect	2.2 mg/dl	8.7 mg/dl	6.1 mg/dl	1.5 mg/dl
SGOT	203 IU/ML	25 IU/ML	14 IU/ML	41 IU/ML
SGPT	68 IU/ML	144 IU/ml	56 IU/ML	13 IU/ML
Alk.phosphate	125 U/L	187 U/L	-	135 U/L
Total protein	5.7 gm/dl	6.2 gm/dl	5.2 gm/dl	5.4 gm/dl
Albumin	2.6 gm/dl	3.9 gm/dl	3.8 gm/dl	3.7 gm/dl
Globulin	3.1 gm/dl	2.30 gm/dl	1.4 gm/dl	1.7 gm/dl
A:G ratio	0.8	1.69	2.71	2.17
2.Urine examination	Dark yellow	Dark yellow	Pale yellow	Yellow
Urine colour	present	Present	Present	Absent
Bile salts	present	Present	Present	Absent
Bile pigments	ocaasional	Nil	nil	nil
RBC	present +++	nil	nil	nil
Albumin	2-4/hpf	Occasional	Occasional	Occasional
Pus cells	1-2/hpf	2-4/hpf	2-4/hpf	2-4/hpf
Epithelial cells	1.6 mg/dl	0.9 mg/dl		
Sr.creatinine				
CBC				
RBC	4	2.70	3.17	5.9
(mill/cumm)	4200	7100	6300	4000
WBC (/cumm)	60000	244000	157000	330000
Platelet (/cumm)	12.8 gm/dl	8.7 gm/dl	10.2 gm/dl	10.7 gm/dl
Hb				

USG (abdomen pelvis) 31/03/21

shows liver cirrhosis with portal hypertension with moderate splenomegaly with gross ascites.

DISCUSSION

Within 17 days of period there was significant changes seen in the patient.

Table no.4 *Shaman aoushadhi* and their *karmukta*

Sr. no.	*Shaman aoushadhi*	*Karmukta*
1	Combination of *Ativisha, Musta, Shunthi, haritaki*	*Aampachan*[6]
2	*Aarogyavardhini, daruharidra sharpunkha*	*Deepan, pachan malshodhan*
3	*Avipattikar churna*	*Sanchit pitta nirharan*
4	*Suvarna sutshekhar*	*Vatpittashamana, aampachan*
5	*Darvyadi Kashay*	*Kleda nirharan, virechan*
6	*Trivrutta avaleha*	*Nitya virechan*
7	*Tapyadi loha , Punarnava Suvarnamakshik*	*Ras –rakta srotos prasadan*

Pathyapathya-

Patient was kept only on *dugdha ahar*[7]. Root cause of *udar* is *mandangni*. Hence *agni bala* as well as *rugnabala rakshan* is important. Patient had *pitta* and *vat* dominance hence *dugdha* was choosen over *takra*. Daily *godugdha* was given as per *agni bala* of patient.

Arkapatra pattabandhan –

Daily 2 time's *arkapatra pattabandhan* with *erand tel* was applied over *udar.*

Management of *jalodar* involves *nitya virechan* for *sanchit dosh nirharan* which results in *shoth* reduction over abdomen. As we know there is *tridosha dushti* in *jalodar* and to avoid repeated *vat sanchiti* in abdomen after dosh nirharna by virechan, *arkpatra pattabandhan* is done. *Charakacharya* mentioned about the covering of abdomen with clothing after giving *virechan* in *vatodar*[8].

Erand tel was applied over *arka patra* and *koshna patras* were applied over abdomen. Clothing was fixed over it (like abdominal belt). External application of *koshna erand tel* helps in reducing *aadhman* while *koshna arkpatra* act as *mrudusweda* which reduces *margavrodh*.

1. *ativisha, mustha , shunthi, haritaki* is useful for *aampachan*[6].
2. Combination of *Aarogyavardhini , daruharidra, Sharpunkha* was given. As *Aarogyavardhini* have properties such as *Yakrutabalya, dipan, pachan* and *malshodhan*[9]. *Daruharidra* has *katu, tikta ras , ushna, ruksha guna* which

helps in *kleda shoshan.Sharpunka* has *tikta kashay ras,katu vipak* and *sheet virya*.it is *kaph pittahar vatvardhak*. It is useful in *yakrut pleeha vyadhi*.

3. *Avipattikar churn* helps in removal of *sanchit pitta* from *aamashay*.it is *virechak* and *vatanulomak*[10].
4. *Suvarna sutshekhar* is *vatpittashamak* and helps in *samyak utapatti ,karya* and *niraharan* of *pitta dosha.sutshekhar ras* mainly act on *agni* and it also mentioned as *rasayana*[11].
5. *Darvyadi kashay* mentioned for *udar,sarvang shoth* and *pandu* .it helps in *purish* and *vat anuloman*.

punarnava has *katu ras, kashay anuras,vipak katu, virya ushana.* It reduces *srotovibandh,mandagni,arochak* also on *rasrakt srotas*.it helps in *kled vahan* through *sweda ,mutra* and *purish.*

Haritaki is useful in *shoth, pandu udar,srotovibandh*.it is *anulomak*.

Nimba has *tiktaras,katuvipak* and *sheeta virya*,it is *kaphapittashamak* and *vatvardhak.tikta ras* and *sheet virya* helps in *raktgat kled shoshan* resulting in *rakt prasadan, pittaprashman*.it helps in *srotomukh vishodhan* and restoring *pitta* in its original *aashay.*

Patol also helps in *doshnirharan* and restoring *pitta* as *nimb.* It is sukh *virechak.*

Kutaki is *tivra virechak*. It does *dosha sanghat vighatan,pitta shodhan* and *bhedan* resuiting in *shoth prashman*.

The above all drugs in combination work as *dosh sanghat vighatak,anulomak,kleda nirharan,virechak* and also work on *ras rakta srotas* by acting as *pittashodhan*,restoring *pitta* to its original *aashay.*

6. Combination of *tapyadi loha, punarnava,suvanamkshik* is given as *balya* and for *raktdhatu prasadan*.

7. ***Nitya virechan***[12]

Trivrutta avaleha –

It is *sukha virechak* (without causing discomfort to patient), easy for administration. It doesn't cause *bala hani* of patient.

CONCLUSION

This case study reveals *ayurvedic* management of *jalodar* significantly reduces the signs and symptoms and probably there is no chance of recurrence applied patient follows *pathyapathya* and avoid alcohol intake. In case of gross ascites after management by modern science there are much more chances of recurrence. According to science of *Ayurveda* the *samprapti* of *udar* is developed in *abhyanter rogmarg* and management is focused on *samprapti vightan* in *abhyanter rogmarg* by giving *nitya virechan*.Hence probably this is the reason for almost no recurrence after *ayurvedic* management of *udar*. Also *arkapatra pattbandhan,dugdhahar* and *nitya virechan* plays important role in the treatment of *udar*. Hence *ayurvedic* management of *jalodar* is better, safe and cost effective.

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