Published online in http://ijam. co. in

ISSN: 0976-5921

Study of the efficacy of Shardul Ghanvati in the management of Udara - *Jatodakawastha*

ResearchArticle

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Abstract

The clinical research study was carried out on 30 pateints of *Udara-Jatodakawastha* to evaluate the efficacy of *Shardul Ghanavati* in the management of *Udara-Jatodakawstha*, The study was conducted at department of *Kayachikitsa*, Aryangla Ayurvedic College and Hospital Satara, Maharashtra. For assessment of result patient was investigated before after for Hemogram, Liver function test & USG Abdomen. Clinical features like Abdominal girth, change in weight, Breathlessness, yellowness of sclera, pedal edema and loss of appetite were assessment criteria for analysis of result.The study reveals that *Shardul Ghanavati* has significant role in management of *Udara-Jatodakawastha*, The total efficacy of treatment was found **59.37** % in subjective criteria, and significant result found in objective criteria (weight & girth measurement), as well as supplementary criteria in period of two months.In sitting position 11.97 % reduction in abdominal girth, In supine position 11.34 % reduction in abdominal girth & mean score reduction in weight 12.48% take place. Also it gives immediate relief to patient by doing "*Virechana"* karma, which is *pradhan chikitsa* of *Udara-Jatodakawastha.*

Keywords: *Udar-Jatodakawastha*, *Shardul Ghanavati, Virechana*

Introduction

Now a days there is tremendous change in life style of people taking junk food, aerated cold drinks, adulterated food materials excessive consumptions of alcoholic beverages gives excess load on liver, Which leads to produce many liver disorders. These liver disorders may results into a disease Called ascites. Also infections like Tuberculosis, Hypoproteinemia due to malnutrition leads to develop ascites, it is common disorder in underdeveloped and developing countries. Ascites is gastroenterological term in which there is accumulation of fluid in peritoneal cavity. Presence of ascites can portent significant medical problems like Renal failure, Hepatorenal shut down, Bacterial peritonitis etc. Ascites is a major complication of cirrhosis, it is associated with 50% mortality over two years and signifies the need for Liver Transplantation. The majority (75%) of patients who present with ascites have underlying cirrhosis, with remainder being due to Malignancy (10%), Heart failure 3%, Tuberculosis 2%, Pancreatitis 1 % & other rare causes(1). Since so many years lots of patient of *Udara-Jatodakawstha* were treated well in our hospital on IPD and OPD basis these patient were responded well to *Ayurvedic* herbal preparation so I decided to work on this disease.

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Udara-Jatodakawstha is parallel term to ascites, In Ayurveda it is described in all *samhitas,* In *Ayurvedic* literature Many herbs and herbal combinations are described for *Udara-Jatodakawastha* & it is a clinical entity which has been included under eight dreaded disease (*Ashtomahagad*) by *Acharya Charaka* The rational and important treatment of this disease mentioned by *Charaka* is *Agnisandhukshan, Virechan* and *Pathyapathya* (i.e to avoid *hetusevan*).So the diet for *Udara* will be *laghu & deepana* helps in *agnivardhana* in the form of *Yusha, Mamsarasa* which also helps to reduce *strotorodha* in *Udara. Godugdh* has prime importance in treatment as well as in *pathyapathya chikitsa* (2).

Charaka had described both medical and surgical management of *Udara-Jatodakawastha*, *Charaka* and *Vagbhata* had mentioned various *virechaka* drugs and their *kalpas* in the management of *Udara-Jatodakawastha*, still medical management of *Udara-Jatodakawastha* is a challenge to medical field. The objective of this study was to establish and reassess the effect of *Shardul Ghanavati* mentioned by, *Ashtanghirdaya Chikitsasthan* 14/36 In the management of *Udara-Jatodakawastha*.

Hypothesis (3):

Null hypothesis (H_0):

Shardul Ghanavati is not effective in the management of *Udara- jatoakawastha*

Alternate hypothesis (H_1):

Shardul Ghanavati is effective in the management of *Udara-jatodakawstha*.

Published online in http://ijam. co. in

ISSN: 0976-5921

International Journal of Ayurvedic Medicine, 2016, 7(4), 230-237

Aims and objectives

1) To study the etiopathology and prognosis of *Udara-jatodakawastha*
2) To Study the efficacy of *Shardul Ghanavati* in the management of *Udara -Jatodakawastha.*
3) To study the standardization of ingredients of *Shardul Ghanavati*.
4) To study the mode of action of *Shardul Ghanavati*
5) To study adverse effect of *Shardul Ghanavati* if any.

Materials and methods

Materials:

1. Patients:

Total 30 patients of *Udara-Jatodakawstha* from OPD and IPD unit of Dr. M. N. Agashe, hospital, Satara were selected irrespective of their religion and sex.

2. Drug : *Shardul Ghanavati*

For the present study *Shardul Ghanavati* was used for the management of *Udara - Jatodakawastha,* the details of formulation and method of preparation are as follows.

Table no- 1 :
Details of *Shardul Ghanavati (4)*

Sr. no	Drug name	Latin/English name	Part used	Qantity
1	Hingu	*Ferula asafoetida* L.	Niryas (Gum resin)	1 part
2	Vacha	*Acorus calamus* L.	Rhizome (Bhumik-kand)	2 part
3	Bidlawan	*NACL*		3 part
4	Shunthi	*Zingiber officinalis* Roscoe.	Rhizome	4 part
5	Ajagi (Jire)	*Cuminum cyminum* L.	Seed	5 part
6	Haritaki	*Terminalia chebula* Retz.	Fruit	6 part
7	Pushkarmul	*Inula racemosa* CB Clarke.	Root	7 part
8	Kushtha	*Sassurea lappa* (Decne.) Sch.Bip.	Root	8 part
9	Nishotar	*Operculina turpethum* (L.) Silva Manso	Root	9 part
10	Danti	*Baliospermum montanum* (Willd.) Muell.	Root	10 Part

Criteria for diagnosis:

Patients having abdominal distention, positive fluid thrill and shifting dullness were selected The inclusion and exclusion criteria used for the patients were as follows:

A) Inclusion criteria:

- *Kukshi aadhman*
- *Aatop*
- *Padshopha*
- *Mandagni*
- *Shalshangandatwa*
- *Karshya*
- Patient having age between 20 to 70 years

B) Exclusion criteria:-

- *Chhidrodar*
- *Baddhrodar*
- Cardiac failure
- Renal failure
- Malignancies
- Hemorrhagic disorders
- HIV & HBsAg infection
- Altered consciousness
- Pancreatic ascites

Assessment criteria:

1. Gradation of Ascites

Grade (NS)	Severity of symptom (*Udara-jatodakawastha*)
0	No fluid
1	Mild
2	Moderate
3	Gross

2. Abdominal girth

Grade	Percentage reduction in abdominal girth
0	> 15%
1	11% - 15%
2	6% - 10%
3	1% - 5%
4	No change

3. Mandagni

Grade	Hunger after taking food in hours
0	Patient feeling complete digestion & hunger after 3 hour of taking meal
1	Patient feeling hunger after 4-7 hour of taking meal
2	Patient feeling hunger after 8-11 hour of taking meal
3	No feeling of hunger even after 12 hour of taking meal

4. Pedal edema

Grade	Pedal edema after pressing normalizes within
0	No edema
1	1-3 second
2	4-6 second
3	7-9 second
4	More than 10 second

5. Breathlessness

Grade		Breathlessness
0	None	Not trouble by shortness of breath on level or uphill
1	Mild	Troubled by shortness of breath on level or uphill
2	Moderate	Walk slower than person of same age
3	Severe	Stop after walking 100 yard or after few minute on level ground
4	Very Severe	Too breathless to leave the house breathless on dressing or undressing

Groups of Management:-

All the selected patients were allocated to single group which was treated by *Shardul Ghanavati.*

Table no - 2 : Showing the details of drug administration are as follows.

Drug	SHARDUL GHANAVATI
Form of drug	*Ghanavati* (Tablet)
Dose	1500 mg (3 tablets each of 500 mg)
Anupana	Luke warm water (*Koshnajala*)
Sevena kala	Empty stomach early in the morning (*Abhakta i.e.Pratahkal*)
Duration	2 Month
Follow up	Weekly
Diet	Diet mention as per Samhita
Vihara	Avoid *diwaswap, Chankraman* and exercise

Observations and results

Table no.3: Showing Distribution of 30 patients according to Gradation of Ascites

Sr.no	Gradation of Ascites	No. of patient	Percentage
1	Mild	1	3.33 %
2	Moderate	8	26.66 %
3	Gross	21	70 %

Gradation of ascites is done on basis of sonological findings as well as clinical examination, such as Fluid thrill, Shifting dull note, Horse-shoe shape dullness, and Puddle sign for mild ascites. These are the gradation parameters, to decide severity of fluid levels in abdomen.

Statistical analysis

In this clinical research study the clinical trial was conducted on 30 patients of *Udara-Jatodakawastha* with tablet *Shardul Ghanavati.* The statistical analysis was carried out by applying students paired t test and percentage of improvement was calculated by the formula.

$$\frac{\text{(Total B.T. – Total A.T.)} \times 100}{\text{Total B. T.}}$$

Results

Table no 4: Showing Effect of *Shardula ghanavati* on various parameters of *Udara-Jatodakawastha* in sitting position.

Parameter	Mean score		Mean diff.	% change	SD	SEM	t	P
(n=30)	BT	AT						
Abdominal Girth	97.73	86.03	11.7	11.98 ↓	5.6453	1.030	11.35	<0.05
Distance between Umbilicus – xiphi-sternum	23.43	17.6	5.83	24.89 ↓	3.108	0.5674	10.27	<0.05
Distance between Umbilicus -pubis	14.93	11.03	3.9	26.12 ↓	2.4718	0.4512	7.89	<0.05
Distance between Umbilicus – RAS iliac crest	26.40	19.96	6.44	24.39 ↓	3.5156	0.6418	10.29	<0.05
Distance between Umbilicus – LAS iliac crest	26.3	20.03	6.27	23.84 ↓	3.4828	0.6358	9.84	<0.05

Published online in http://ijam. co. in

ISSN: 0976-5921

International Journal of Ayurvedic Medicine, 2016, 7(4), 230-237

Table no 5: Effect of *Shardula ghanavati* on various parameters of *Udara-Jatodakawastha* in supine position.

Parameter	Mean score		Mean diff.	% change	SD	SEM	t	P
(n=30)	BT	AT						
Abdominal Girth	92	81.56	10.44	11.34 ↓	5.6453	1.030	9.66	<0.05
Distance between Umbilicus - xiphisternum	21.76	16.63	5.13	23.57 ↓	2.7495	0.5019	10.22	<0.05
Distance between Umbilicus - pubis	15.13	10.66	4.47	29.54 ↓	2.7748	0.5066	8.80	<0.05
Distance between Umbilicus – RAS iliac crest	24.43	19.1	5.33	21.81 ↓	3.5156	0.6418	8.30	<0.05
Distance between Umbilicus – LAS iliac crest	24.56	18.8	5.76	23.45 ↓	3.4828	0.6358	9.72	<0.05

(RAS-Right anterior superior, LAS- Left anterior superior, Dist.- Distance, bet.-between Diff.-Difference.)

Table No.6: Effect of *Shardula ghanavati* on various parameters of *Udara-Jatodakawastha*.

Parameter	Mean score		Mean diff.	% change	SD	SEM	t	P
(n=30)	BT	AT						
Weight	61.43	53.76	7.67	12.48 ↓	4.036	0.7368	10.39	< 0.05
Gradation of Ascites	2.66	1.16	1.5	56.39 ↓	0.5722	0.1044	14.36	< 0.05
Gradation of Agni	2.56	1.06	1.5	58.59 ↓	0.6822	0.1245	12.04	< 0.05
Gradation of Breathlessness	3.4	1.3	2.1	61.76 ↓	0.7588	0.1385	15.16	< 0.05
Gradation of Pedal edema	3.16	1.23	1.93	61.07 ↓	0.6913	0.1262	15.29	< 0.05

n: number of patients; BT: before treatment; AT: after treatment; ↓: decrease;
SD: standard deviation; SEM: standard error; P<0.05: 95% significant.

Table No.7: Effect of *Shardul Ghanavati* on mean score gradation status of various parameter of *Udara – Jatodakawastha*, such as Breathlessness, *Jatharagni*, Amount of fluid, pedal edema etc. before and after treatment.

Parameter	Amount of Fluid		Agni		Breathless-ness		Pedal edema	
	BT	AT	BT	AT	BT	AT	BT	AT
Mean score Gradation	2.66	1.16	2.56	1.06	3.4	1.3	3.16	1.23

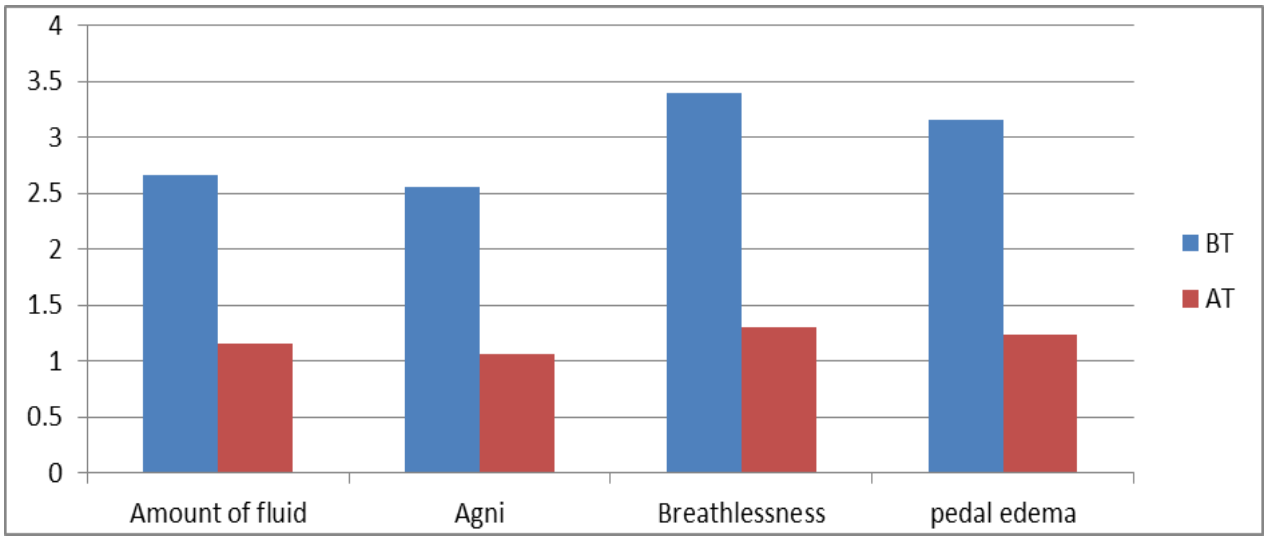


Table No.8: Effect of *Shardul Ghanavati* on abdominal girth of 30 patients of *Udara-Jatodakawastha* in sitting position.

Para-meter	(n = 30)	Abdominal Girth (cm)	Dist. bet. Umbili-cus – xiphister-num (cm)	Dist. bet. Um-bilicus – pubis (cm)	Dist. bet. Um-bilicus – RAS iliac crest (cm)	Dist. bet. Umbilicus – LAS iliac crest (cm)
Mean Score	BT	97.73	23.43	14.93	26.40	26.3
	AT	86.03	17.6	11.03	19.96	20.03

Table No .9: Effect of *Shardul Ghanavati* on abdominal girth of 30 patients of *Udara-Jatodakawastha* in supine position.

Parameter	(n=30)	Abdominal Girth (cm)	Dist. bet. Umbil-icus – xiphister-num (cm)	Dist. bet. Umbilics – pubis (cm)	Dist. bet. Um-bilics – RAS iliac crest (cm)	Dist. bet. Umbilics – LAS iliac crest (cm)
Mean Score	BT	92	21.76	15.13	24.43	24.56
	AT	81.56	16.63	10.66	19.1	18.8

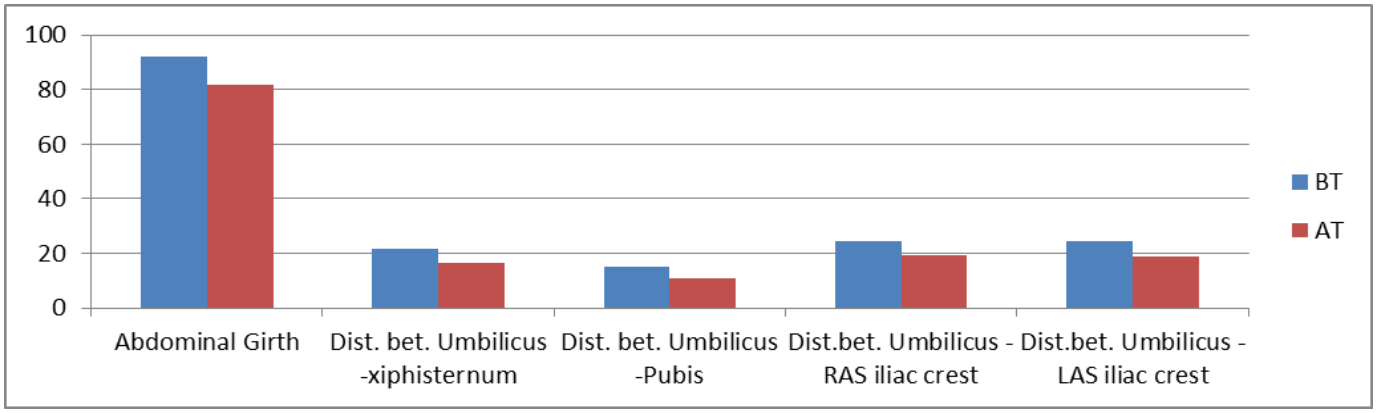
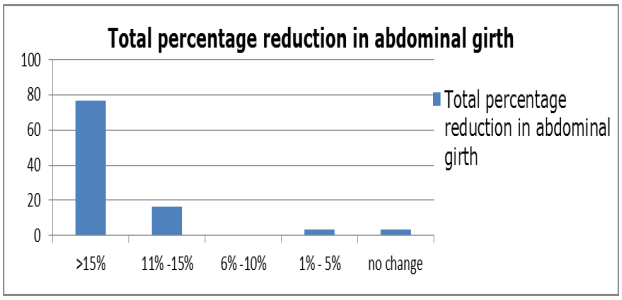


Table No. 10: Distribution of 30 patients according to percentage reduction in abdominal girth of 30 patients of *Udara-Jatodakawastha*.

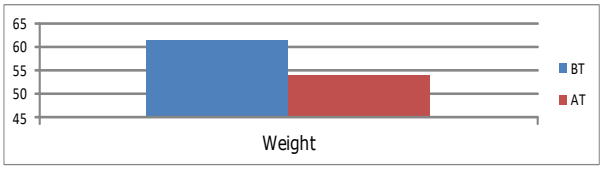
Sr. no	Total percentage reduction in abdominal girth	No. of patients	Percentage
1	>15%	23	76.66%
2	11% - 15%	05	16.66%
3	6% - 10 %	00	00%
4	1% - 5%	01	3.33%
5	No change	01	3.33%



Above table shows that 76.66% patients have,>15% total percentage reduction in abdominal girth while 16.66% patient shows total percentage reduction in abdominal girth in between 11% - 15%. Also above table shows each 3.33% patients have total reduction in abdominal girth in between 1% - 5% and no change in abdominal girth respectively.

Table No. 11: Effect of *Shardul Ghanavati* on Weight of 30 patients of *Udara-Jatodakawastha* .

Parameter	(n =30)	Weight (kg)
Mean Score	BT	61.43
	AT	53.76



Mean score of reduction in weight of 30 patients of *Udara – Jatodakawsatha* was take place from 61.43 kg to 53.76 kg, In duration of two months.i.e.7.67 kg reduction in weight. That is in terms of percentage 12.48% reduction in weight take place.

Above clinical research study in 30 patients of *Udara-jatodakawastha* with tablet *Shardul Ghanavati* shows following results,

- The mean score of reduction in weight of 30 patients of *Udara – Jatodakawsatha* was take place from 61.43 kg to 53.76 kg, in duration of two months.i.e.7.67 kg reduction in weight. That is in terms of percentage 12.48% reduction in weight take place, which was statistically highly significant.
- Abdominal girth in sitting position was reduced by 11.97 % whereas in supine position it was reduced by 11.34 %.Both these parameter shows highly significant results.
- Among the various distance measured, distance between Umbilicus and Xiphisternum was reduced by 29.15 % and 23.57 % in sitting and supine position respectively.
- Likewise, the distance between Umbilicus and Pubis was reduced by 26.12 % and 29.54 % in sitting and supine position respectively.
- The distance between Umbilicus to Right anterior superior iliac crest was reduced by 24.39 % and 21.81 % in sitting and supine position respectively.
- The distance between Umbilicus to Left anterior superior iliac crest was reduced by 23.84 % and 23.45 % in sitting and supine position respectively.
- Average change in gradation status that is, improvement in status of grades of amount of fluid in abdomen is take place from grade 2.66 to 1.16 and in terms of percentage average improvement in status of amount of fluidis 56.25 %.
- Average change in gradation status that is, improvement in status of *agni* is take place from grade 2.56 to 1.06 and in terms of percentage average improvement in status of *agni i*s 58.44%.
- Average change in gradation status that is, improvement in status of grades of Breathlessness is take place from grade 3.4 to 1.3 and in terms of percentage average improvement in status of Breathlessness is 61.76 %.
- average change in gradation status that is, improvement in status of grades of pedal edema is take place from grade 3.16 to 1.23 and in terms of percentage average improvement in status of pedal edema is 61.05 %.
- The efficacy of *Ghanavati* was proved by applying paired 't' test which give promising results. The total efficacy of treatment was **59.37 %** in subjective criteria, and significant result found in objective criteria (weight & girth measurement), as well as supplementary criteria.
- All these parameters has shown statistically highly significant results.

Discussion

In this study 30 patients were registered & have completed their full course of treatment.

Effect of therapy

Effect of *Shardul Ghanavati* on mean score gradation status of various parameter of *Udara – Jatodakawastha*, such as Breathlessness, *Jatharagni*, Amount of fluid, pedal edema etc. before and after treatment.

- Average change in gradation status that is, improvement in status of grades of amount of fluid in abdomen is take place from grade 2.66 to 1.16 and in terms of percentage average improvement in status of amount of fluidis 56.25 %.
- Average change in gradation status that is, improvement in status of *agni* is take place from grade 2.56 to 1.06 and in terms of percentage average improvement in status of *agni i*s 58.44%.
- Average change in gradation status that is, improvement in status of grades of Breathlessness is take place from grade 3.4 to 1.3 and in terms of percentage average improvement in status of Breathlessnessis 61.76 %.
- average change in gradation status that is, improvement in status of grades of pedal edema is take place from grade 3.16 to 1.23 and in terms of percentage average improvement in status of pedal edema is 61.05.

Effect of *Shardul Ghanavati* on abdominal girth of 30 patients of *Udara- Jatodakawastha* in sitting position.

Histogram 5.6 shows that,

- Abdominal girth is change from 97.73 cm to 86.03 cm i.e.11.7 cm reduction in abdominal girth, In terms of percentage 11.97 % reduction in abdominal girth.
- Mean score reduction of distance from umbilicus to xiphisternum is from 23.43 cm to 17.6 cm i.e.6.83 cm reduction. In terms of percentage 29.15% reduction.
- Mean score reduction of distance from Umbilicus to pubis is from 14.93 cm to 11.03 cm i.e.3.9 cm reduction. In terms of percentage 26.12 % reduction.
- Mean score reduction of distance from Umbilicus to RAS iliac crest is from 26.40 cm to 19.96 cm i.e. 6.44 cm reduction. In terms of percentage 24.39 % reduction.
- Mean score reduction of distance from Umbilicus to LAS iliac crest is from 26.30 cm to 20.03 cm i.e. 6.27 cm reduction. In terms of percentage 23.84 % reduction

Effect of *Shardul Ghanavati* on abdominal girth of 30 patients of *Udara- Jatodakawastha* in supine position.

Histogram 5.7 shows that,

- Abdominal girth in supine position is change from 92 cm to 81.56 cm i.e.10.44 cm reduction in abdominal girth, In terms of percentage 11.34 % reduction in abdominal girth.
- Mean score reduction of distance from umbilicus to xiphisternum is from 21.76 cm to 16.63 cm i.e.5.13 cm reduction. In terms of percentage 23.57 % reduction.
- Mean score reduction of distance from Umbilicus to

pubis is from 15.13 cm to 10.66 cm i.e.4.47 cm reduction. In terms of percentage 29.54 % reduction.

- Mean score reduction of distance from Umbilicus to RAS iliac crest is from 24.43 cm to 19.1 cm i.e. 5.33 cm reduction. In terms of percentage 21.81 % reduction.
- Mean score reduction of distance from Umbilicus to LAS iliac crest is from 24.56 cm to 18.8 cm i.e. 5.76 cm reduction. In terms of percentage 23.45 % reduction.

Percentage reduction in abdominal girth of 30 patients of *Udara-Jatodakawastha*.

- Histogram 5.8 Shows that, that 76.66% patients shows >15% total percentage reduction in abdominal girth while 16.66% patient shows total percentage reduction in abdominal girth in between 11% - 15%. Also above table shows each 3.33% patients have total reduction in abdominal girth in between 1% - 5% and no change in abdominal girth respectively.

Effect of *Shardul Ghanavati* on Weight of 30 patients of *Udara-Jatodakawastha*.

- Histogram 5.9 shows that, the mean score of reduction in weight of 30 patients of *Udara – Jatodakawsatha* was take place from 61.43 kg to 53.76 kg, in duration of two months.i.e.7.67 kg reduction in weight. That is in terms of percentage 12.48% reduction in weight take place.

Total effect of therapy

The total efficacy of treatment was **59.37** % in subjective criteria, and significant result found in objective criteria (weight & girth measurement), as well as supplementary criteria.

Though the subject *Udara roga* and its management is vast to study, on ayurvedic aetiological factors, diagnosis and treatment, here attempt is made by doing clinical (experimental) research work and literature study of Udara roga.

Udara-Jatodakawastha (Ascites) is mostly found in middle and old age,the incidence of disease is higher in male patients with mixed diet. Most of the patients were primary educated or illiterate. The observation reveals that the majority of patients were service man & small scale business holders. In the majority of patients the prime cause of disease is Alcohol intake (80%) for prolong duration.

The majority of patients have dietary habit *vishamashana*, status of *agni- Manda, Koshta-krura*,most of patient come to hospital when they have gross ascites.

Probable mode of action of *Shardul Ghanavati* in treating *Udara-jatodakawstha:*

The reference of this *kalpa* is from *Ashtanghridaya chikitsasthana, Gulma chikitsa adhaya 14/36*. It is given in the form of *churna,* but considering the quantity and acceptance of the drug I have used it in *Ghanavati* form in my project work. Ingredient of Ghanavati are as follows.

Sr. No	Plant name	Rasa	Vipaka	Veerya	Guna	Karma(5)
1	Hingu	Katu	Katu	Ushna	Laghu, Snigdha Tikshna	Deepan, pachan, Shulahar, Ruchya Shwasahar
2	Vacha	Tikta, Katu	Katu	Ushna	Laghu, Tikshna	Agnideepan, Pachan, Lekhaniya
3	Bidlawan	Lawan	-	Ushna	Tikshna, Vikasi	Adhmanahar, Deepan, Udarashulhar
4	Shunthi	Katu	Madhura	Ushna	Laghu, snigdha	Agnideepan, Aamapachana, Shothahar.
5	Ajagi(jirak)	Katu	Katu	Ushna	Laghu, Snigdha Tikshna	Ruchya, Deepya, Agnivardhaka, Pachana, Balya
6	Haritaki	Kashya rasa pradhan, pancha-rasatmak	Madhur	Ushna	Laghu, Ruksha	Tridoshhar, Deepan, Pachan, Anuloman
7	Pushkarmul	Tikta, Katu	Katu	Ushna	Laghu	Agnideepan, Aamapachana, Jalashoshak, Parshwashulhar
8	Kushtha	Tikta, Katu Madhur	Katu	Ushna	Laghu, Raghu, Tikshna	Hikka, shwasa, Kasahar, Lekhaniya.
9	Nishotar	Tikta, Katu Madhur	Katu	Ushna	Laghu, Raghu, Tikshna	Sukhavirechaka, Bhedaniya, Krumihara
10	Danti	Katu	Katu	Ushna	Guru Tikshna	Tikkshnavirechak, Swedajana,

Due to *Agnimandya* and *Aama sanchya* there is formation of abnormal *Rasa dhatu* so that, obstruction of *srotasa* takes place .Due to *Aamsanchaya & srotorodha* there is increase in *dosha sanchaya & Prana,Agi & Aapan* are gaited *vitiated, Srotorodha* especially take place

In *Udaka & Swedavaha srotas*. And then by *Upsnehana nyaya* (6) fluid get accumulate in *Audarya kala* and leads to asites. In this way *srotorodha* is main reason for *Udara roga.*

Rational behind the selection of drug

The formulation *Shardul Ghanavati* is selected for the study has described in *Ashtanghirdaya Samhita Chikitsasthan 14/36*, in the management of *Udara-Jatodakawastha as* it contains *Hingu, Vacha, Bidlawan, Shunthi, Jirak, Haritaki, Kushtha, Pushkarmul, Nishotar* and *Danti* in an increasing order.

Among the above selected drugs *Dantimul* root is strongly *Virechak* and *mutral*, drug *Nishotar* and *Haitaki* are *virechaka* and *anulomaka*, *pushkarmul* is *shoshak* and rest all drugs are *Agnideepak, pachak* and *adhmanvibandhar*. And all above is appropriate treatment of this disease, Hence the drug *Shardul Ghanavati* has been proven very useful in *Udara-Jatodakawastha.*

According to Harrison (7) patients of small amounts of ascites can usually be managed with dietary sodium restriction alone. When a moderate amount of ascites present, diuretic therapy is usually necessary .If ascites is still present, with high doses of diuretics in patients who are compliant with a low sodium diet, then they are defined as having refractory ascites, and alternative treatment modalities including repeated large volume paracentesis, or a TIPS (Transjugular Intrahepatic Porto - Systemic Shunt) procedure should be considered. Recent studies have shown that, TIPS while managing the ascites, does not improve survival of patients. Unfortunately, TIPS is often associated with an increased frequency of hepatic encephalopathy. The prognosis for patients of cirrhosis with ascites is poor and some studies have shown that <50% of patients survive 2 years after the onset of ascites. So, there should be consideration for liver transplantation in patients with the onset of ascites (8).Thus, to avoid repeated paracentesis and also transplantation, it was planned to use the Ayurvedic medicine for such disease. Also prevalence of patients coming to our hospital was considerably high, also this disease was one of the leading cause of death in present society, so I desirably decided & worked over it.

Abdominal paracentesis is conducted in those patients who have gross ascites and having respiratory distress.These patients after paracentesis choose for clinical research study, i.e. total 3 pateint out of total 30. Their weight and abdominal girth measurements are taken after paracentesis, and the present treatment procedure is considerd as initial measurement for starting tablet *Shardul Ghanvati.*Few patients having gross ascites and respiratory distress along with complication such as HRS Type 1 & HRS Type 2, Hepatic encephalopathy, Portal hypertension with bleeding were not included in this study.

Conclusion

The formulation *shardul ghanavati* was found an excellent remedy for *Udara-Jatodakawastha.*The tablet *Shardul Ghanavati* shows promising results on all parameters of assessment criteria of disease. i.e. on Weight, Abdominal Girth in sitting and standing position. On Gradation of amount of fluid, Breathlessness, Status of Agni,& gradation of pedal edema.

The tablet *Shardul Ghanavati* is clinically safe & effective herbal preparation having no any side effects.In management of *Udara-Jatodakawastha* (Ascites) along with proper *pathya* & *Dugdh-Aahar* this drug have valuable answer.

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