A CASE STUDY OF ACUTE RENAL FAILURE (MUTRAGHATA) AND ITS MANAGEMENT BY AYURVEDA

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Abstract - Santorpanajanita vyadhi are associated hand in hand with multiple life style induced disorder. Here the same obese lady with having history of Hypertension with Ischemic heart disease got treated with her general physician. She had Oesteo-arthritis at both the knees and had taken pain killer medicines for the relief. So, it was 'patient-controlled analgesia' (PCA).

Intermittent complaints chest pain and vertigo made her angiography and 2D echo before 3 months of Renal failure. Her sedentary life style hetu continue with time and her bad knees doesn't allow to even walk. Which ultimately lands in time towards cardiac disorder, which made her shift to statin drugs with antiplatelets drugs and anti-hypertensive management. Within one and half month's patient have symptoms of Nausea, vomiting, Anorexia, Dysuria with Giddiness & higher values in Blood urea level with Serum Creatinine.

Keywords – Acute Renal Failure, Mutraghata, Extracorporeal Ayurved Treatment, Kidney wash, "Mootrasya Kleda vahanam", Shadangodak Chikitsa, Abhyanga, Nadi Sweda.

INTRODUCTION

"Kledasya Mootram Abhivahanam". Kleda will reveal the functional importance of mootra in maintenance of body. Kleda is represent as a by-product of Jaliya dhatu. As per Dalhana Acharya, Kleda is Ardra(moist) Bhava. And this Ardra properties in excess attaining to form of Mala. Kleda vahanam being Jaliya is more resembles to Kapha among Tridosha. Actually, Kleda carried through Rakta towards renal units to excrete through mootra. We can say that Rakta – Pitta Ashraya-ashrayi bhava to kledasruti and Swedana as a function of pitta which nurtures Kleda by sravana. In regard to pitta, Kledana can be signs through Krishnatva, dourgandhya and tanutva of rakta. Even 'Abb' dhatu to some extent make dravatva of Kleda with malasachayana. Panchabhautiksamghatan of Mootra and Raktadhatu is same that is jala and tejmahabhuta.Mootra is formed from tej(fire) and jala (water). Rakta(blood) is formed from tej(fire) andjala (water). Both are formed from same physical constituents and same qualities both have

Urine formation is actually made from blood. So, there is relation between the urine and raktadhatu is established.

In this case, same factors association can be found. As Mootra association with Kleda. Kleda relation with Kapha, pitta and rakta as a physiology. But one more literatual factor should be taken in consideration that Medovaha srotas are affected due to lack of physical exercise, day sleep, excessive intake of fatty food and (alcoholic drinks – not in this case).

When there is occurrence of pathological changes due to Santarpana vyadhi Janita Uccha Rakta Chap (Hypertension), weight gain and changes in Coronary artery diseases. Cardiologist decided to start antilipidemic drugs for IHD and Angiographic changes. It was 40 mg dose in earlier for statin. Then with patient's symptoms regarding ARF, they try to reduced it with refer for Nephrologist opinion. But till the

time (From Feb 2019 to April 2019) patient develop symptoms with dysuria, vertigo, vomiting and Giddiness.

In Ayurvediya perspective, it is over weighted, hypertensive patient in metabolic process of meda dhatu then there will be occurrence of improper functioning ofkidney and hamper the function of Kleda especially pitta Vruddhi in mala. That's improper functioning of kidney,result's in dysuria with nausea and vomit with giddiness and weight loss due to statin in 40 mg. Her blood level urea and creatinine are a presentation of Anti Lipidemic work to raise in pitta to create "Mal-pradoshaja Vikara" with hampering the function of Kleda due to metabolic acidosis. Hence, here most important culprit was Kleda dysfunctional Aam production with "Statin" chemical rise up pitta dosha, Medodushti in dysuria condition.

So, in this case, we need to work for pitta dushti in mala (Mootra), Medodushti to make sthanatva in mootra and partially hamper vrikka functions too. The jaliya dhatu get vitiated in Samprapti to form Aam and kledavahan get not worked. So, pitta vitiation with vata, kapha obstructive pathy and Aam stanatva, Picchila, durgandha need special intension in treatment.

Here, patients get hydrated with Shadangodak in Muhurmuhu dose. Hence, we can overcome from pathophysiology of Kidney Thrust. Musta, Parpatak (Pitta papda), ushir, Chandan, Rakta Chandan and Sunthiare some extent to Kleda purifier as well as help in Aam pachan too. Snehana (Abhayanga) and nadi swedana are helping dosha separation from shakha to koshta as well sravan,shrotomukhavishodhana will happened due to nadi swedana. And omit of Statin will be a part of Nidanparivarjana to some extent to fasten the kledanaprocess through Mootra nirhana. Here, throughout the process, patient was under observation with total modern medicine omit in the treatment.

CASE PRESENTATION

Clearly describe the plan for care, as well as the care which was actually provided, and the outcome.

A 65 yrs. old female having C/o Dysuria & vomiting, with C/o Vertigo & Giddiness came to hospital in 3.4.2019. Patient having H/o hypertension since from 2015. Ayurved medicine for management of Knee pain. She had her angiography & IHD management in Dec 2018. Later with intermittent complaints had her physician opinion& again foundedsome ECG changes. So, they advised her to have a cardiac opinion. So, (in Feb. 2019) She had her cardiologist opinion at district city. Started medication for Tab. Atorvastin 40mg (Statin group) with antiplatelet drugs Tab. Ecosprin 75 mg with Anti H.T. medication for E/o Coronary artery disease (CAD) with Left circumflex artery (LCx) &patient-controlled analgesia (PCA) was found.

The above said complaints arises after two months in 3rd April 2019. Her son was a laboratory technician had her routine lab reports at the end of March 2019. Where sudden increase in Blood urea level & Sr. creatine was surprise him to have a nephrologist opinion himself. Then patient was also realised that she is having less urge of urine too. On advice of nephrologist, they perform further more routine Lab. Investigation.

Dated -08.04.2019.

Sr. No	Lab Test.	Results.
1	Sr. Creatinine	6.55
2	Blood Urea Level	102.40
3	Na level	132
4	K	4.2
5	Sr. Calcium	7.9
6	Sr. Phosp.	6.3
7	Alkaline Phosp.	Wnl.
8	HIV	N.R.
9	HBsAg	N.R.

Sr.No.	CBC	Results
1	Hb	6.6
2	Rbcs	2.82
3	Wbcs	9.3
4	Platelets	157
5	HCT	25.6
6	MCV	90.8
7	MCH	30.5
8	MCHC	33.6
9	RWD	13.7
10	PCT	0.08
11	MPV	5.4
12	PWD	17.4
13	Neutrophils	73
14	Lymphocytes	21
15	Monocytes	03
16	Eosinophils	03
17	Basophils	00
18	ESR	-

Sr. No.	Urine R/Microscopy.	Results
	Sample Not Received	S.N.R.

Having H/o Ischaemic heart disease with Chronic Kidney Disease in III rd. grade. An opinion given by nephrologist dated 3.4.19. Picture showed it that she is having high value of Sr. Creatinine & Blood Urea Level, little higher WBCs count & Eosinophilia with most of the other laboratory picture is within normal limit. But present complaint with Nausea & vomiting with increase in Uric Acid level.

IHDwith H/o Renal calculi with using NSAIDs. So, patient advised for admission under close observation Input & Output charge, with her Lower down Blood pressure (90/60 mm of Hg.) present at the time of admission. Urine output was lower still hypotension is there. Patient still complaining of Janu Sandhi shoola (Knee Joints Pain)& Sakashta Chankramana (Painful movements).

Patient came to Ayurved Institute Hospital was prescribedon 8/4/19-

- 1. Cap. Ural 1Bid, (As a mutra Virechana & Mootra Shodhana)
- 2. Shadangodaka (Musta, Parpatak, Ushira, Chandana, Rakta Chandana, Sunthi = 500 mg each) = dose for 1 Lit of water to boil it& consume it freshly for Muhurmuhu. As any entity excess in body can be consider as Aam/Kleda. And Pachan evum Kleda removal which blocks the Renal unit (Basti Marma) can be possible with Muhurmuhu Kleda nirharan as well treat Avarana of Apana vayu by kapha evam Kleda too. Mild Virechana (Mridu Virechana) is recommended for increased Pitta lakshana in Rugna with symptoms of Nausea& Vomiting with Bhrama (kwachita) as well supportive treatment for Anuloman of Apana Vayu with its Tyajjana Karma (Pakshaghatetu Virechana Shreshta, Udavarta charak Chikitsa Adhyaya for Mridu virechana.)Bahya Tilataila Abhyanga & Nadi Swedana Chikitsa to dislocate Shakhashrita dosha to Koshta again with Vatanuloman.

The picture is little bit better for after starting the treatment. Her input as well output became little bit better with slight rise in B.P on 13/04/2019 i.e.110/70 mm of Hg. Even her leg ache and Janu sandhi shoola get lower in pain gladiation. On the same day morning her blood investigation was advice. And the picture was so good by the means of laboratorial value within 6 days pure Ayurved Medicines only.

13/04/2019

Sr. No	Lab Test.	Results.
1	Sr. Creatinine	1.74
2	Blood Urea Level	28.42
3	Na level	132
4	K	4.2
5	Sr. Calcium	7.9
6	Sr. Phosp.	6.3
7	Alkaline Phosp.	Wnl.
8	HIV	N.R.
9	HBsAg	N.R.

Sr. No.	CBC	Results
1	Hb	8.6
2	Rbcs	2.82
3	Wbcs	9.3
4	Platelets	157
5	HCT	25.6
6	MCV	90.8
7	MCH	30.5
8	MCHC	33.6
9	RWD	13.7
10	PCT	0.08
11	MPV	5.4
12	PWD	17.4
13	Neutrophils	73
14	Lymphocytes	21
15	Monocytes	03
16	Eosinophils	03
17	Basophils	00
18	ESR	-

Sr. No.	Urine R/Microscopy.	Sample 20 ml.
1	Colour	Yellow.
2	Appearance	Haziness
3	Quantity	Sufficient for the test 20 ml.
		But having good output.
4	Reaction	Acidic in pH.
5	Albumin	Nil.
6	Sugar	Nil.
7	Acetone	Nil.
8	Occult blood	Nil.
9	Bile salt	Absent
10	Bile Pigment	Absent
URINE MICROSCOPIC EXAMINATION		
11	Epithelial Cells	4 to 5.
12	Pus Cell	3 to 5.
13	Crystals	Nil.

14	RBCs	Nil.
15	Other findings.	Nil.

On 15/04/2019 - Clinical picture is little better than earlier. Her Ayasen Shwasa (Dyspnoea after little exertion) reduced, she can walk easily to her routine, independent walk upto Panchakarma Room. Her Knees pain reduced furthermore& pain at walking is more reduced. We observed that her Blood pressure without any Anti-Hypertensive medicine returns further normal level i.e.120 / 80 mm of Hg with Samyak Mala, Mootra pravritti (Urine cleared, Stool passed). Tillin the Noon round with increased activity, she doesn't have any fresh complaint with her age-related normal returning of pulse & blood pressure. Here, patient get added with Sariva + Manjishta = 3 gms. Each Bid with Luke warm water as a part of Blood purification to increase the detoxification process via urination. Actually, any kind of excess biochemistry in the body can be revised under term of Aam. To increase patient's Agni, colleague physician added Syrup. Aristozyme 3 tea spoon full Bid for Agni Vardhana after good effects of Shadangodaka Aam Pachan process with normalisation in excess Blood urea level and Serum Creatinine. While continuing TilaTaila Abhyanga is process to get back increased Dosha & Aam from Shakha to Koshta part. TilaTailaAbhyangya has a definite role to accelerate the blood flow circulation in distal organs followed by Nadi Swedana to dilate the Srotas Mukha (Openings). Hence, we are able to say that normal urine output returns with "Mootrasya Kleda vahanam" by the means of Abhyanga and Nadi swedan become easier task which accelerate extracorporeal action of "Kledasya Mootra Abhivahanam".

Patient tolerates the treatments get better in Pulse & blood pressure. Then by adding extra mootralgana (Diuretics) which boost the renal system was decided with minimal drug therapy concepts. We added Gokshura and Pashanbheda to improve kidney functions as well as to boosting Kleda expulsion rate too. From next day on 16/04/2019.

Patient's partial urine output became better with no Blood pressure drop. It was amazing to watch Normal range of Blood pressure without any allopathic Anti-Hypertensive drugs used in such crucial time. Patient's Blood pressure remain in between 110 /70 mm of Hg to 130 / 80 mm of Hg till dated 21/04/2019.

Patient was rechecked for the confirmation of IPD discharge and shifting toward OPD base follow-up & Abhyanga on dated 22/04/2019. Her Lab investigation regarding Complete blood cell count, BUL, Sr. Creatinine& Blood Sugar random was within normal limits. Hence decided to discharge her with her OPD follow up.

22/04/2019.

Sr. No	Lab Test.	Results.
1	Sr. Creatinine	1.54
2	Blood Urea Level	24.58
3	Bsl R	102.58

Sr. No.	CBC	Results
1	Hb	8.8
2	Rbcs	2.87
3	Wbcs	8.3
4	Platelets	183
5	HCT	26.5
6	MCV	92.3
7	MCH	30.7
8	MCHC	33.2
9	RWD	14.1
10	PCT	0.08

11	MPV	4.2
12	PWD	16.8
13	Neutrophils	71
14	Lymphocytes	22
15	Monocytes	04
16	Eosinophils	03
17	Basophils	00
18	ESR	-

On OPD level Patient was continued with most basic concepts of the treatments. As Cap. Ural (Vasu Pharma) 1 Bid, Shadangodaka (Musta+Parpatak+Ushir+Chandan+Rakta Chandana+Sunthi) 500gm each three times in a day. Each dose boil with 1 litre of water to drink it Muhurmuhu. Swadishta Virechana Churna 1.5 gm bed time with luke warm water. Liq. Aristozyme 10 ml TilaTaila Abhyanga with Nadi swedan continued.

Again,it was amazing with her routine Blood Investigation on dated 16/05/19. After 25 days follow up of being well in status.

16/05/2019.

Sr. No.	CBC	Results
1	Hb	9.1
2	Rbcs	3.15
3	Wbcs	13.5
4	Platelets	307
5	HCT	28.2
6	MCV	89.5
7	MCH	28.9
8	MCHC	32.3
9	RWD	13.2
10	PCT	0.11
11	MPV	3.5
12	PWD	17.2
13	Neutrophils	70
14	Lymphocytes	19
15	Monocytes	02
16	Eosinophils	09
17	Basophils	00
18	ESR	-

Sr. No	Lab Test.	Results.
1	Sr. Creatinine	1.44
2	Blood Urea Level	32.45
3	Bsl R	96.35

On the same base, we had opportunity to treat several cases with same formula, some of them are on and off type of follow up. Some of them had taken few days treatment and then no approach because of cured.

Here, One male patient of renal failure from long time approach to us. He is also having the same treatment concept to treat him by Ayurved perspective. Though I am presenting here with single case study. But I can't resist myself to share this male case had wonderful results though had late approach to us.

A 49 yrs. Old male patient having H/o Hypertension & Gout came to Chaitanya Ayurved Hospital with C/o Joint stiffness, swelling with breathlessness. On examination having febrile pulse with 104 /min and lower side blood pressure i.e. 96/80 mm of Hg. Patient was not sound in economically. Hence, we decided for minimum examination with 5 days interval for next Investigation assessment. He was prescribed for 1. Tab.Guduchighana 2tabs Tid, 2. Shadangodaka for Muhurmuhu prashana, 3. Gokshura+Patha+Pashanbheda = 1gm each in combination bid with luke warm water, 4. Cap. Ural (Vasu pharma) 1 Bid, 5. Swadishta Virechana Churna 1.5 gm at bed time. 6. With TilaTaila Abhyanga with Sarvanga Swedana.

His Investigation at the time of admition on date 2/7/2019 was.

Sr. No.	CBC	Results
1	Hb	11.4
2	Rbcs	3.61
3	Wbcs	14.5
4	Platelets	350
5	HCT	36.1
6	MCV	100
7	MCH	31.6
8	MCHC	31.6
9	RWD	14.6
10	PCT	0.15
11	MPV	4.2
12	PWD	16.8
13	Neutrophils	76
14	Lymphocytes	11
15	Monocytes	04
16	Eosinophils	09
17	Basophils	00
18	ESR	-

PATIENT HAVING EOSINOPHILIA.

Sr. No	Lab Test.	Results.
1	Sr. Creatinine	3.93
2	Blood Urea Level	60.37
3	Sr. Uric Acid	8.87
4	Bsl R	86.41

Sr. No.	Urine R/Microscopy.	Sample 30 ml.
1	Colour	Pale Yellow.
2	Appearance	Clear
3	Quantity	Quantity not sufficient,
		(Q.N.S)
4	Reaction	Acidic in pH.
5	Albumin	Trace.
6	Sugar	Nil.
7	Acetone	Nil.
8	Occult blood	Nil.
9	Bile salt	Absent
10	Bile Pigment	Absent

URINE MICROSCOPIC EXAMINATION		
11	Epithelial Cells	1 to 2.
12	Pus Cell	3 to 4.
13	Crystals	Nil.
14	RBCs	Nil.
15	Other findings.	Nil.

From day 2nd of admition, patient feels better in joint stiffness with reduced swelling girth. Blood pressure (130/80 mm of Hg) was within normal limit and his pulse (80/mins) with afebrile pulse. His pulse and BP were maintained throughout the treatment days with Samyak Mala – Mootrata. Joint swelling & pain reduced day by day. On date 08/07/2019. He was planned again for pathological investigation. His Blood urea level and creatinine reduces to better significant digits but Uric acid was maintained as it is. But increased WBCs counts came towards normal limits. Patient not willing to continued admition and hence next day we gave him discharge against medical advised.

His lab Investigation on dated 08/07/2019 was.

Sr. No.	CBC	Results
1	Hb	9.8
2	Rbcs	3.11
3	Wbcs	8.5
4	Platelets	273
5	HCT	30.7
6	MCV	98.7
7	MCH	31.5
8	MCHC	31.9
9	RWD	14.6
10	PCT	0.11
11	MPV	3.7
12	PWD	15.9
13	Neutrophils	76
14	Lymphocytes	18
15	Monocytes	03
16	Eosinophils	03
17	Basophils	00
18	ESR	-

Sr. No	Lab Test.	Results.
1	Sr. Creatinine	2.83
2	Blood Urea Level	43.88
3	Sr. Uric Acid	9.42
4	Bsl R	-

MANAGEMENT AND OUTCOME

Hence. On accounts of these two cases, we can say that Shadangodak and Abhyanga has significant role in Aam pachan& Kleda Nirharana as well as this pattern make stability rather to reduce the value for further worsen the Renal Case toward Dialysis. And Shadangodak significantly working as Ayurvediya Extracorporeal drugs in Renal Metabolic disorders.

DISCUSSION

MDRD equation: - 186 x (Creatinine/88.4)-1.154 x (Age)-0.203 x (0.742 if female) x (1.210 if black), To convert urea mmol/L to BUN mg/dL – divide by 0.357

Nephrologist suggest her for the possibility of wait and watch for further worsen within 2 to 3 days for Dialysis. If creatinine is blood serum rise upto 10 mg/dl, Patient will plan for dialysis with her lower down Glomerular filtration rate.

But patient's relative decided for Ayurvediya treatment for extracorporeal effect. Hence, her Shadangodaka, Abhyanga, Nadi Swedana makes her out for the possibility of Dialysis. Even as per thinking as a Mala pradoshaja Vikara with vitiation of dosha in mala, Mridu Virechana had some better results to enhance her Apana Karma with Shakrita Mootra nirhana and Anuloman vata results in Pitta Virechana through mala to stop her nausea, vomiting with dyspepsia. Abhyanga & nadi swedana worked as Vatanuloman as well as Microlevel correction of VikrutaShakhaKoshtiya Gati.

Finally, we summarize the lessons learned from this case.

ACKNOWLEDGMENTS

I am very much thankful to my pathology technical staff who trust on me when there is crucial time to take his mother for the kidney failure risk equation. I also thankful to Nidana Laboratories run by Dr. Rajendra Firke Sir M.B.B.S., M.D.(Pathology) who made our job supportive as a second reading confirmation time to time. To my Principal of Chaitanya Ayurved Hospital and Medical college, Bhusawal who allowed me to admit the patient under me in Kayachikitsa Dept. And my Nursing staff who manage her Ayurvediya medicine, Panchakarma with maintenance of TPR/BP chart with I/O chart very carefully. And those patients who continued with follow up more sincerely and regularly till dated.

REFERENCES

- 1. Acharya Vidhyadhar Shukla & Prof. Ravidatta Tripathi, "Charak Samhita; Vol.1, Delhi; Chaukhamba Sanskrit Pratishthan; 2011; Vimanthana 8/96, 590.
- 2. आयुर्वेददीपिका व्याख्या (चक्रपाणिदत्त कृत) (Charak e-samhita book).
 - "श्लेष्मा हि स्निग्धश्लक्ष्णमृदुमधुरसारसान्द्रमन्दस्तिमितगुरुशीतविज्जलाच्छः।तस्य स्नेहाच्छलेष्मलाः स्निग्धाङ्गाः, श्लक्ष्णत्वाच्छलक्ष्णाङ्गाः, दुत्वाद्दृष्टिसुखसुकुमारावदातगात्राः, माधुर्यात् प्रभूतशुक्रव्यवायापत्याः, सारत्वात् सारसंहतस्थिरशरीराः, सान्द्रत्वादुपचितपरिपूर्णसर्वाङ्गाः, मन्दत्वान्मन्दचेष्टाहारव्याहाराः, स्तैमित्यादशीघ्रारम्भक्षोभविकाराः, गुरुत्वात् साराधिष्ठितावस्थितगतयः, शैत्यादल्पक्षुत्तृष्णासन्तापस्वेददोषाः, विज्जलत्वात् सुश्लिष्टसारसन्धिबन्धनाः, तथाऽच्छत्वात् प्रसन्नदर्शनाननाः प्रसन्नस्निग्धप्यवर्णस्वराध्र भवन्ति।त एवङ्गुणयोगाच्छलेष्मला बलवन्तो वसुमन्तो विद्यावन्त ओजस्विनः शान्ता आयुष्मन्तध्र भवन्ति॥९६॥ Vimanthana 8/96.
 - "मृदुत्वं जलकृतम्। अवदातगात्रा इति मृदुत्वादेवावदातत्वम्। अशीघ्रशब्द आरम्भादिभिः प्रत्येकमभिसम्बध्यते। सारगतयो न स्खलन्ति, अधिष्ठितगतयः सर्वेण पदेन महीमाक्रामन्ति, अवस्थितगतय इति अवस्थितत्वेन न चपला गतिर्भवति। प्रसन्ने दर्शनानने यस्य स तथा। वसुमत्त्वादि प्रकृतिरूपं यद्भवति, तत् प्रकृतिप्रभावाज्ज्ञेयम्॥९६॥" आयुर्वेददीपिका व्याख्या (चक्रपाणिदत्त कृत)
- 3. Acharya Vidhyadhar Shukla & Prof. Ravidatta Tripathi, "Charak Samhita; Vol.1, Delhi; Chaukhamba Sanskrit Pratishthan; 2011; Vimanthana 8/97, 590. पित्तमुष्णं तीक्ष्णं द्रवं विस्तमम्लं कटुकञ्च।तस्यौष्ण्यात् पित्तला भवन्त्युष्णासहा, उष्णमुखाः, सुकुमारावदातगात्राः, प्रभूतविप्लुव्यङ्गतिलपिडकाः, क्षुत्पिपासावन्तः, क्षिप्रवलीपलितखालित्यदोषाः, प्रायोमृद्वल्पकपिलश्मश्रुलोमकेशाश्चः, तैक्ष्ण्यात्तीक्ष्णपराक्रमाः, तीक्ष्णाग्नयः, प्रभूताशनपानाः, क्लेशासहिष्णवो, दन्दश्काः; द्रवत्वाच्छिथिलमृदुसन्धिमांसाः, प्रभूतसृष्टस्वेदमूत्रपुरीषाश्चः, विस्रत्वात् प्रभूतपूतिकक्षास्यशिरःशरीरगन्धाः; कट्वम्लत्वादल्पशुक्रव्यवायापत्याः; त एवङ्गुणयोगात् पित्तला मध्यबला मध्यायुषो मध्यज्ञानविज्ञानवित्तोपकरणवन्तश्च भवन्ति॥९७॥
- 4. Acharya Vidhyadhar Shukla & Prof. Ravidatta Tripathi, "Charak Samhita; Vol.1, Delhi; Chaukhamba Sanskrit Pratishthan; 2011; vimansthan5/14, 590. विदाहीन्यन्नपानानि स्निग्धोष्णानि द्रवाणि चारक्तवाहीनि दृष्यन्ति भजतां चातपानलौ॥१४॥
- 5. Dr. P. V. Sharma and Dr. Anantramsharma, "Susruta Samhita", VoII, Chaukhambasurbharatiprakashan, Varanasi 2013; sharirasthana 4/31, 54.

"रक्तमेदःप्रसादाद्वृक्कौः, मांसासृक्कफमेदःप्रसादाद्वृषणौः, शोणितकफप्रसादजं हृदयं, यदाश्रया हि धमन्यः प्राणवहाः; तस्याधो वामतःप्लीहा फुप्फुसश्च, दक्षिणतोयकृत् क्लोमचः; तद्विशेषेण चेतनास्थानम्, अतस्तस्मिंस्तमसाऽऽवृते सर्वप्राणिनः स्वपन्ति ॥३१॥ Su. Sha. 4/31.

वेदनानामधिष्ठानं मनो देहश्च सेन्द्रियः। केशलोमनखाग्रान्तर्मलद्रवगुणैर्विना" (च.शा.1) इति। चेतनासहचरितं मनोऽपि विशेषेण हृदयाधिष्ठानं मतम्। अतस्तस्मिन् हृदये तमसा तमोगुणेनोच्छ्रितेन आवृते निरुद्धे सित, सर्वप्राणिनः स्वपन्ति। तस्याकारं दर्शयन्नाह- पुण्डरीकेणेत्यादि। हृदयं कमलमुकुलाकारमधोमुखम्॥३१-३२॥निबन्धसङ्ग्रह व्याख्या (डल्हण कृत) Su. Sha. 4/31.

- 6. Acharya Vidhyadhar Shukla & Prof. Ravidatta Tripathi, "Charak Samhita; Vol.1, Delhi; Chaukhamba Sanskrit Pratishthan; 2011; Vimanthana 5/10, 589.
 - "अत ऊर्धं स्रोतसां मूलविद्धलक्षणमुपदेक्ष्यामः।तानि तु प्राणान्नोदकरसरक्तमांसमेदोमूत्रपुरीषशुक्रार्तववहानि, येष्विधकारः; एकेषां बहूनि; एतेषां विशेषा बहवः ।तत्र प्राणवहे द्वे, तयोर्मूलं हृदयं रसवाहिन्यश्च [१] धमन्यः, तत्र विद्धस्याक्रोशनविनमनमोहनभ्रमणवेपनानि मरणं वा भवितः; अन्नवहे द्वे, तयोर्मूलमामाशयोऽन्नवाहिन्यश्च धमन्यः, तत्र विद्धस्य पिपासा [३] सद्योमरणं चः रसवहे द्वे, तयोर्मूलं हृदयं रसवाहिन्यश्च धमन्यः, तत्र विद्धस्य शोषःप्राणवहविद्धवच्च मरणं तिल्लङ्गानि चः रक्तवहे द्वे, तयोर्मूलं यकृत्विहानौ रक्तवाहिन्यश्च धमन्यः [४], तत्र विद्धस्य श्यावाङ्गता ज्वरो दाहः पाण्डुता शोणितागमनं [५] रक्तनेत्रता चः मांसवहे द्वे, तयोर्मूलं कटी वृक्कौ च, तत्र विद्धस्य स्वेदागमनं स्निग्धाङ्गता तालुशोषः स्थूलशोफता पिपासा चः मूत्रवहे द्वे, तयोर्मूलं कटी वृक्कौ च, तत्र विद्धस्य स्वेदागमनं स्निग्धाङ्गता तालुशोषः स्थूलशोफता पिपासा चः मूत्रवहे द्वे, तयोर्मूलं बस्तिर्मेद्वं च, तत्र विद्धस्यानद्धबस्तिता मूत्रनिरोधः स्तब्धमेद्भृता चः पुरीषवहे द्वे, तयोर्मूलं पक्काशयो गुदं च, तत्र विद्धस्यानाहो दुर्गन्धता ग्रिधतान्त्रता चः शुक्रवहे द्वे, तयोर्मूलं स्तनौ वृषणौ च, तत्र विद्धस्य क्लीबता चिरात् प्रसेको रक्तशुक्रता च [७] ः आर्तवहे द्वे, तयोर्मूलं गर्भाशय आर्तववाहिन्यश्च धमन्यः, तत्र विद्धाया वन्ध्यात्वं मैथुनासहिष्णुत्वमार्तवनाश्चः सेवनीच्छेदाद्रजाप्रादुर्भावः; बस्तिगुदविद्धलक्षणं प्रागुक्तमिति ।स्रोतोविद्धं तु प्रत्याख्यायोपचरेत्, उद्धृतशल्यं तु क्षतविधानेनोपचरेत् ॥१२॥" С.Vi. 5/10.
- 7. Dr. Sharma and Dr. Anantramsharma. "Susruta Samhita", Vol.II, ChaukhambaSurbharatiprakashan, Varanasi, 2013; Sharirasthana 9/12, 122. "अत ऊर्ध्वं स्रोतसां मूलविद्धलक्षणमुपदेक्ष्यामः ।तानि तु प्राणान्नोदकरसरक्तमांसमेदोम्त्रपुरीषश्क्रार्तववहानि, येष्वधिकारः; एकेषां बहुनि; एतेषां विशेषा बहवः ।तत्र प्राणवहे द्वे, तयोर्मुलं हृदयं रसवाहिन्यश्च ।१। धमन्यः, तत्र विद्धस्याक्रोशनविनमनमोहनभ्रमणवेपनानि मरणं वा भवतिः, अन्नवहे द्वे, तयोर्मूलमामाशयोऽन्नवाहिन्यश्च धमन्यः, तत्र विद्धस्याध्मानं शूलोऽन्नद्वेषश्छर्दिः पिपासाऽऽन्ध्यं [२] मरणं चः उदकवहे द्वे. तयोर्मूलं ताल् क्लोम च. तत्र विद्धस्य पिपासा [३] सद्योमरणं च, रसवहे द्वे, तयोर्मूलं हृदयं रसवाहिन्यश्च धमन्यः, तत्र विद्धस्य शोषःप्राणवहविद्धवच्च मरणं तिल्लङ्गानि चः रक्तवहे द्वे. तयोर्मूलं यकुरुलीहानौ रक्तवाहिन्यश्च धमन्यः [४] , तत्र विद्धस्य श्यावाङ्गता ज्वरो दाहः पाण्डता शोणितागमनं ।५। रक्तनेत्रता चः मांसवहे द्वे. तयोर्मुलं स्नायुत्वचं रक्तवहाश्च ।६। धमन्यः, तत्र विद्धस्य श्वयथुर्मांसशोषः सिराग्रन्थयो मरणं चः मेदोवहे द्वे, तयोर्मूलं कटी वृक्कौ च, तत्र विद्धस्य स्वेदागमनं स्निग्धाङ्गता तालुशोषः स्थूलशोफता पिपासा चः मूत्रवहे द्वे, तयोर्मूलं बस्तिर्मेढं च, तत्र विद्धस्यानद्धबस्तिता मूत्रनिरोधः स्तब्धमेढ़ता च: प्रीषवहे द्वे. तयोर्मूलं पकाशयो गृदं च. तत्र विद्धस्यानाहो दुर्गन्धता ग्रथितान्त्रता च: शुक्रवहे द्वे. तयोर्मूलं स्तनौ वृषणौ च, तत्र विद्धस्य क्लीबता चिरात् प्रसेको रक्तशुक्रता च [७] ; आर्तवहे द्वे, तयोर्मूलं गर्भाशय आर्तववाहिन्यश्च धमन्यः, तत्र विद्धाया वन्ध्यात्वं मैथ्नासिहष्णुत्वमार्तवनाशश्चः सेवनीच्छेदाद्रुजाप्रादुर्भावःः बस्तिगृदविद्धलक्षणं प्रागुक्तमिति ।

स्रोतोविद्धं तु प्रत्याख्यायोपचरेत्, उद्धृतशल्यं तु क्षतविधानेनोपचरेत् ॥१२॥ Su.Sha. 9/12.

"प्राणादीनामार्तवान्तानामेकादशानां प्रत्येकं [८] वहने द्वे द्वे स्रोतसी। अस्थिमज्जस्वेदवाहिषु स्रोतःसु सत्स्वप्यनिधकारः; कथं? तत्रास्थिवहानां सकलानामेव मेदो मूलं, मज्जवहानां च तेषां सकलान्येवास्थीनि सकलशरीरगतानि, न च सकलशरीरगतिद्धलक्षणं साध्यादिज्ञाननिश्चायकम्, एवं स्वेदवहानामपि केवलं मेदो मूलिमिति [९] पूर्वेणैव समानम्, अतः शल्यतन्त्रे तेषां [१०] मूलिवद्धलक्षणानिधकारः।" निबन्धसङ्ग्रह व्याख्या (डल्हण कृत).

- 8. Dr. P. V. Sharma and Dr. Anantramsharma, "Susruta Samhita", Vol.II, Chaukhambasurbharatiprakashan, Varanasi 2013; sharirsthan4/31, 54. रक्तमेदःप्रसादाद्वृक्कौ; मांसासृक्कफमेदःप्रसादाद्वृषणौ; शोणितकफप्रसादजं हृदयं, यदाश्रया हि धमन्यः प्राणवहाः; तस्याधो वामतः [१] प्लीहा फुप्फुसश्च, दक्षिणतो यकृत् क्लोम [२] च; तद्विशेषेण चेतनास्थानम्, अतस्तस्मिंस्तमसाऽऽवृते सर्वप्राणिनः स्वपन्ति ॥३१॥Su. Sharira sthan 4/31.
- 9. Acharya Vidhyadhar Shukla & Prof. Ravidatta Tripathi, "Charak Samhita; Vol.1, Delhi; Chaukhamba Sanskrit Pratishthan; 2011; Vimanthana 5/16, 590. "अव्यायामाद्दिवास्वप्नान्मेद्यानां चातिभक्षणात्।मेदोवाहीनि दुष्यन्ति वारुण्याश्चातिसेवनात्॥१६॥८. Vi. 5/16. मूत्रितेत्यादौ मूत्रवेगयुक्तस्य उदकादिसेवनादिति ज्ञेयम्॥१०-२२॥आयुर्वेददीपिका व्याख्या चक्रपाणिदत्त कृत.
- 10. Acharya Vidhyadhar Shukla & Prof. Ravidatta Tripathi, "Charak Samhita; Vol.1, Delhi; Chaukhamba Sanskrit Pratishthan; 2011; Vimanthana 8/90, 646. "कार्यफलं सुखावाप्तिः, तस्य लक्षणं- मनोबुद्धीन्द्रियशरीरतृष्टिः॥९०॥" C. Vi. 8/90.