

**A COMPARATIVE STUDY OF PANDU IN VRUKKAROG WITH
REFERENCE (W.S.R) TO CHRONIC RENAL FAILURE (CRF)****Dr. Abhay M. Kadu***

Prof. Rashastra & B.K., Jupiter Ayurved Medical College, Shankarpur, Nagpur.

Article Received on
21 July 2021,Revised on 10 Aug. 2021,
Accepted on 31 Aug. 2021

DOI: 10.20959/wjpr202111-21622

Corresponding Author*Dr. Abhay M. Kadu**Prof. Rashastra & B.K.,
Jupiter Ayurved Medical
College, Shankarpur,
Nagpur.**ABSTRACT**

Pandu (Rakta dhatukshay) is one of the main Lakshan (symptom) in Vrukkarog. It is characterized by Mlaan Lakshan, Sheet Prathrana, Amla Preeti, Rookshta, Sputita, Parusha etc. It denotes the Raktavaha strotas Dusti. The word Vrukkarog is first found in Bhaishajya Ratnavali. It is described as updrava of Amvaat, Visuchika, Musurika and cheraj/Puranjawar. There are many diseases of kidney but chronic renal failure (CRF) can be compared or correlate with Vrukkarog. CRF is a silent epidemic of the 21st Century cost of treatment is very high so as the Morbidity and Morortality. As the lakshan of Vrukkarog is directly proportional to the symptoms of CRF. Therefore looking for

another option like Ayurved in general observation that diagnosis and the treatment based on basic principals of Ayurved helps to improve the quality of the life and diseases prognosis.

KEYWORDS: Vrukkarog, CRF, Pandu, Rakta dhatu.**INTRODUCTON**

The Normal State of Mind and Body is "Prakruti", and it's Abnormal State Resembles "Vikruti or Vikar". There are 'N' number of Vikruti and Vyadhi in our Body. In this present scenario. Vrukkarog in one of the fatal Disease with high morbidity and Mortality. The Description of Vrukkarog is first found in Bhaishajya Ratnvali (B.S.). It is Described as upadrava of Amavaat, Visuchika, Masurika and Cheraj/Puranjawar. In our Samhita like Bruhatreys the word 'Vrukkarog' is not mentioned but Mutra Rog, Pandu are described in detailed. In Modern Medicine there are different type of Vrukkarog (Kidney Disorder) are mentioned. If we focus one of the major Kidney (kidney) Disease is Chronic Renal Failure (CRF)/ Chronic Kidney Disease (CKD) or End Stage Renal Disease (ESRD),

We can get some symptoms of this Diseases which in similar or co-relate with Vrukkarog lakshan. In Bhaishajya Ratnavali Vrukkarog Addhaya are mentioned following shlok as lakshan of Vrukkarog. (Ref. from B.S.32/6).

Here “Pandu” is a word which specify that qualitative and quantitative Degradation of Blood (Rakta) which is associated symptoms of this Disease. Pandu Rog is well explained in Bruhadtrai in very systemic manner. In this study Pandu is consider as one of the symptom which is observed in Vrukkarog.

As per modern medicine Anaemia in CRF in due to decrease in Erythropoietin Enzyme Secretion. It stimulates the Bone Marrow to produce RBC. In renal dysfunction the chain is blocked thus Anemia is observed in CRF patients.

AIM

To evaluate A comparative Study of Pandu in Vrukkarog w.s.r. to Chronic Renal Failure (CRF).

OBJECTIVE

This Article is intended

- i) To study the symptoms of Pandu Lakshan in Vrukkarog.
- ii) To study symptoms of Pandu in the patients as per or samhita.
- iii) To study investigation like Hb%, RBC, WBC, platelet count, total proteins, KFT in CRF.
- iv) To study Pandu in Vrukkarog.

LITERARY RESEARCH

Literarily Research was focused on Basic Principles of Ayurveda Regarding Anatomy & Physiology of urinary tract and also aimed at the Diagnostic Aspect of CRF in Ayurveda.

The origin of study arises from Bhaishajya Ratnavali. In this text Vrukkarog is described in detail with management and treatment.

STUDY OF PATIENTS SUFFERING FROM CRF

Information gathered from pre diagnosed patients with CRF in observational study. Case record from covering diagnostic aspects of ayurved i.e. causative factors, prodromal signs and symptoms, origin duration, progress of symptoms, aggravating factors and reliving factors were prepared. (Ref. fr. Shu.Sar. 4/30)

Vrukka is formed from Rakta dhatu and mada dhatu mainly.

Vrukkas are said to be the maternal contribution according to strotas.

(Ref. fr. Cha.Vi.5/8 & Shu.Sar. 9/18)

PATHOGENESIS

Pathogenesis can be understood by contents in Samaprapiti.

Dosha – Tridosha (mainly Kapha & Vata)

Dushya – Meda, Rakta, upadhatu – Sira, Mala- mutra

Agni – Mandgani

Margh – Madhayam (Marmaghat Vyadhi)

Strotas – Medovaha, Mutrovaha

Strotas Drusti type – Atipravayuritti, sang and Vimargha Gaman.

Adishtan – Basti and Vrukka

Vyadhi Condition – Chronic

This pathogenesis can also be understood by flow diagram.

Causative Factors (Santarpataka Hetu)

(Upadrava of Masurika, Visuchika, Aamvaat, Puranjwar)

↓
Vitiation of all Dosha especially and Kapha & Vata

↓
Vitiation of Body tissue and system

↓
Leads to Degeneration of Tissues

↓
Apatarpan (Dhatu Kshya)

↓
Vitiation of Vital Organ (Marmaghat)

↓
Basti /Vrukka

↓
CRF

↓
(Raktadhatu Kshay) Pandu

MATERIALS AND METHODS

A) Patients of Vrukkarog (CRF) sample size were 40.

B) Lab investigations Study.

Blood sample in EDTA Bulb and plain Bulb, Disposable Syringes, Sprit Swab, Needle No. 24, Gloves, Hemoglobino Meter, KFT Reagents etc.

C) Modern Pathological Equipment's.

Are used with Dignoplus LAB like synex cell counter for Hb%, RBC, WBC, platelet count evaluation and semi- automatic Biochemistry analyzers for KFT and serum total proteins investigation.

INCLUSIVE CRITERIA

Patients having signs and symptoms of Vrukkarog (as per our Ayurvedic Text) aged between 18 to 70 years (irrespective of Sex).

EXCLUSION CRITERIA

Patients suffering from any major illness like Cancer, TB, HIV, Polycystic Kidney Diseases, Aplastic Anemia, Sickel Cell Anemia.

METHODOLOGY

- i) Patients in inclusive criteria were selected.
- ii) Written consent from each patient were taken before their selection.
- iii) Patient selected diagnose as Vrukkarog with the help of case record format specially designed for Vrukkrog.
- iv) Pandurog observed as per Ayurvedic text.
- v) Hemogram (Hb%, WBC, RBC Count, platelet etc. KFT, Sr. Protein Text of all patients done.

OBSERVATION

In the present study 40 patient of Vrukkarog were selected. The disease was diagnosed on the basis of sign and symptoms of patients described in ayurvedic text.

BY COMPARING PRAKURTI PARIKSHAN

46% of patient were having vata pradhan pitta prakurti. About 24% of patient were having pitta pradhan vataj prakurti. 16% of patients has pittapradhan Kaphaj prakurti. 11% of patients have Kapha Pradhan pittaj prakurti and 3% of were having kapha pradhan vataj prakurti.

BY COMPARING STROTAS PARIKSHAN

98% of the patients had Raktavaha strotas dusti, 90% of the patients had Mootravaha Strotas dusti, 70% of the patients had Pranavaha Strotas dusti, 65% of the patients had Udakvaha Strotas dusti, 39% of the patients had Annavaha Strotas dusti, 6% of the patients had

Medovaha Strotas dusti, 4% of the patients had Astivaha Strotas dusti, While 32% of the patients had Swedavaha Strotas dusti. The most commonly found was Rakta vaha and motravaha Strotas Dusti.

BY COMPARING VRUKKAROG HETU (NIDAN)

Purenjwar (Cheraj Jawar) is the main cause found in Vrukkarog about 44% of the sample size. Amavaat is found in 33% Vishuchika in 42% and Masurika in 16% of the sample size. In many patients all the four cause did not found but still they are suffered due to Vrukkarog. But still due to this four causes often Vrukkarog is seen. (Ref. fr. Bha.Rat. 93/1).

BY COMPARING POORVAROOP OF VRUKKROG

Needranash found as poorvarupa in 64% of the patients, Agni Mandya in 70%, Akshikoot shoth in 90%, Mukhapad shoth in 87%, Rukshatwak in 80%, Mukhapadshoth and Akshikoot Shoth is dominant symptoms found in poorvapa. (Ref. fr. Bha.Rat. 93/3).

BY COMPARING LAKSHAN OF VRUKKAROG

As described previously in the introduction when we study the thirty lakshans in N=40 patients of sample size. Pandu is the only symptoms which was found in every patient. So it is predominant symptoms or Lakshana. Similarly Pippasa in 83%, Sawarnga Shoth in 81%, Moorcha in 79%, Vibandha in 70%, Jawar in 74%, Sarvang Vedna in 70%, Chardi in 68%, Kshudanaash in 64%, Karnanaad in 58%, Kativedna and Hastapaddaha in 55%, Swedabhav 53%, Vrukka Vedna 48%, Greeva Vedna 44%, Skande Vedna 46%, Lingnash 38%, Udarshool 33%, Mutrashmari 24%, Rakta Yukta Mutra Pravrutti 22%, Hrudrog 18%, Yakrut and pleeharog 5%, Trikapida 20%. In this above lakshan "Pandu" is denoted as main symptoms.

BY COMPARING PANDU LAKSHAN

In this study all lakshan found in 81% cases. Mlaan Lakshan found in 96% of cases, sheet prarthana in 92%, Amlapreeti 81%, sheerashaitilya in 90%, Rookshata in 87%, Parusha in 85%, Sphutita and Twakruksha in 90%. After observing this value pandu is found in each and every patient of Vrukkarog. (Ref. fr. Cha.chi. 70/65 & Asht.Hur.Su. 11/17).

DISCUSSION

When we compare modern symptoms of CRF, almost ten symptoms of CRF (Chronic Renal Failure) were observed in 40 patients. The topmost symptoms is fatigue, shortness of Breath

was found in 96%, Thirst and muscle cramp in 90%, puffiness of face and weight loss in 90%, Decreased urine output and milky urine in 87%, Bad Breath in 80%, Hypertension in 84%, Loss of Appetite and itching all over body 78%, Nausea and vomiting 69%, Nocturnal Micturition in 56%, Hamaturia in 15%. In this way percentage of frequency is found in CRF.

BY COMPERING LABS Hb%

The percentage of Hemoglobin in present study of sample size of 40 patients revealed that in every patient of Vrukkarog Hb% was decrease i.e. below normal. It is irrespective of gender.

This is similar point of view to Ayurvedic Pandu Lakshan. This may be due to low Erythropoietin production from vrukka (Kidneys).

BY COMPARING LABS RBC COUNT

RBC study when carried out in 40 patients out of that female 28%, and Male 72% showed that RBC count is maximum patient in Both the gender is below normal level. This may be due to pandu in vrukkarog and RBC count was also below normal level.

BY COMPARING LABS WBC COUNT

WBC count showed that 76% of patients had normal range and 11% showed below normal level. 13% were having above normal level. This Indicates that WBC count has no significant effect as compared to Hb% of RBC count in pandu with Vrukkarog.

BY COMPARING LABS PLATELETS COUNT

Platelet count does not shows any specific effect of pandu in Vrukkarog. Because 80% of patients showed with in normal range of platelet count. 15% had below normal count and 5% of patents had above normal level of platelet count.

By comparing labs KFT i.e. Blood Urea, Sr. Creatinine, Electrolyte like (Na^+ , K^+ , Cl^-) Sodium, Potassium, Chloride.

In this study of Vrukkarog the Result were observed that all 100% of patients has Blood urea, Sr. creatinine levels was above normal value.

Due to Renal Dysfunction the electrolyte like Na^+ , K^+ , Cl^- are also imbalance.

BY COMPARING LABS URIC ACID TEST

In this study Sr. Uric Acid resembled 88% patients were normal range in both the genders, 8% of male patient has slightly raised value. While 4% female has normal value of uric acid.

BY COMPARING LAB SR. TOTAL PROTEIN

In this sample size of 40 patients 30 patients means 75% of sample size were in normal range and 25% of patient were below the normal level there were no patient above the normal value. Therefore Vrukkarog did not effect on Sr. Total Protein of the blood.

CONCLUSION

In this observational study as data was qualitative and sample size was 40 (i.e. more than 30). Therefore test of statistic is "pearsons" correlation coefficient applied to prove whether there is association between the Lakshan of Vrukkarog and Pandu (Rakta Kashay) Lakshan.

RESULT

After the Analysis of Data

- i) A positive correlation was observed between Pandu (Rakta Dhatu Kshay) and Modern Symptom of CRF. This shows that Lakshan of Vrukkarog increases as Lakshan of Pandu also increases.
- ii) A negative correlation is seen between pandu and Hb% this shows that as Lakshan of Pandu increases Hb% decreases.
- iii) A positive correlation is between lakshan of Vrukkarog and the symptoms of CRF. This shows that as lakshan of Vrukkarog increases the symptoms of CRF also increases.

Financial support and sponsorship

Nil.

Conflicts of interest

There is no conflict interest.

REFERENCES

1. Charak Samhita of Agnivesh (IIIrd Edition) Varanasi, Chaukhambha, Surbharti Prkashan Author- Yadavji Trikamji Acharya (Reprint 2013).
2. Sushrut Samhita (Part I & II), Ambikadas Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, (Reprint-2012).

3. Sushrut Samhita – Sharir Sthan, Bhaskar Govind Ghanekar, Laxmandas Publication Delhi, (Reprint 2014).
4. Ashtanga Hruday Prof. Shrikant Murty, Chaukhambha Academy, Varanasi, (Reprint 2005).
5. Shri Govinddas Virchit Bhaishajya Ratnavali, Varanashi, Kashi Sanskrit Granthmala, Chaukhambha, Surbharti Prkashan (Reprint 2008).
6. Study of Nidan Panchak of CRF dissertation submitted to Dept. of Ayurved University of Pune.