



STANDARDIAZATION OF RAKTA PARIKSHA ACCORDING TO PRAKRITI

¹Modi Harendra kumar

²Sasmal Sipra

¹M. D. Scholar, ²Professor, P. G. Department of Rog nidan evam Vikrati vigyan, Shubhdeep Ayurved Medical College & Hospital, Indore (M.P.)

ABSTRACT :

Diagnosis of diseases are mainly Based on the clinical examination and laboratory investigation for the management of various diseases. several methods like *trividha*, *shadvidha*, *asthavidha* and *dashvidha* etc are explained in classics these examinations are pertaining to the clinical examination. Only *mutra* and *pureesh pariksha* are the laboratory tools which were used in ancient times. *Rakta pariksha* was also used and described in the form of physical examination but its use in clinical practice is lacking due to improper knowledge and standardized features in comparison to modern parameters of blood examination. In the present era, many diagnostic tools and method are available but Ayurveda is behind in this area, so we can develop some new test on the basis of Ayurvedic literature. As stated in ayurved in the context of blood, *Rakta* properties are described as per *Deha prakriti* likes *vataja*, *pittaja*, *kaphaja* and *sama prakriti*. *sama prakriti* individual have *Rakta* just like *indragopa* while all other *deha prakriti* have colour of blood like *tapneeye*, *kamalpatra*, and *gunja*. Acharya Dalhan has also described pure *rakta* is not very dense, not very viscous and is not clotted very soon and when any cloths get stained by blood the it is easily washed. *Rakta pariksha* was being used in ayurveda mainly in the form of the physical aspects. but its proper knowledge is lacking. Texts are silent about certain aspects which can vary the results. The tests have not mentioned the site of blood collection, which container should be taken for stain and what is washing time and duration etc. So in this research we are standardizing *prakrat rakta* property on basis of, color, density, viscosity and cloths staining standard parameter shall be correlated with blood component and a new test can be developed for assessment of the status of blood in an individual.

I have conducted 5 pilot study on healthy individual on the basis of site of blood collection, volume of blood, dropping amount of blood, types of cloths, temperature and procedure time was assessed.

Keywords : *Rakta pariksha*, *Prakrati pariksha*, *Deha prakriti*.

INTRODUCTION: Diagnosis of diseases are mainly based on the clinical examination and laboratory investigation and very important for the management diseases. Several methods have been described in Ayurveda like *Trividha*¹, *Shadhvidha*², *Asthavidha*³ and *Dashvidha*⁴ *Pariksha* etc. these examinations are pertaining to the clinical examination. Only *Mutra*³ and *Pureesh*³ *Pariksha* are the laboratory tools which

were used in ancient times. *Rakta Pariksha* was also used and was described in the form of Physical Examination but its use in clinical practice is lacking due to improper knowledge and standardized features in comparison to modern day parameters of Blood Examination. According to the Ayurveda, whatever is taken in the form of food that is digested and produces *rasa*, *rasa* is mixed with '*Ranjaka Pitta*' then this *rasa* reaches

Liver and Spleen through the portal vein and get converted into *Rakta* it forms *Rakta Dhatu*. Formation of *Rakta Dhatu* is also has a special relationship with the Liver .the Liver is the site of the origin of *Raktavaha Srotas*. *Rakta* enhances tone and ‘Complexion of skin’it strengthens and nourishes ‘*Manas Dhatu*’. The whole physiology of the body is dependent on this tissue. *Rakta* strengthens and keeps the body Healthy , increase life span and keeps the person active. When a person has pure blood in his body , he exhibits symptoms like attractive complexion and glowing skin.his sense organs work perfectly.*Rakta* is very important entity in context to maintainnce of internal environment. *Healthy Rakta* maintains the normal color of the skin.

SCOPE : In the present era many Diagnostic tools or method are developing in modern science but Ayurveda in backwards in this area, so we can develop some new test on the basis of ayurvedic literature.as stated in Ayurveda in the context of Blood, *Rakta* properties are described as per *Deha Prakriti*⁵ likes *vataja ,pittaj ,kaphaja* and *sama prakriti*.*Sama prakriti* individual have *Rakta* just like *Indragopa* while all other *Deha Prakriti* have colour of blood like *Tapneeye , kamal Patra* and *Gunja* .*Dalhan acharya*⁶ has also described pure *Rakta* is not very dense,not very viscous and is not clotted very soon and when any cloths get stained by it is easily washed off. *Rakta Pariksha* will be standardized to be used in future for assessment of the status of *Rakta*.

Lacuna in Knowledge on The Subjects

Rakta Pariksha was being used in Ayurveda mainly in form of the Physical aspects. But its use and proper knowledge are lacking. Texts are silent about certain

aspects which can vary the results.the texts have not maintained the site of Blood collection ,which container should be taken, which kind of cloths should be taken for stain and what is washing time and duration etc. So there is a need of proper standardization of the above variables.

AIM AND OBJECTIVE:

-To standardize *Rakta Pariksha*
-Study on features of *Rakta Pariksha* in apparently healthy volunteers Following standardized methodology and blood examination.

MATERIAL AND METHOD:

Material:

- Literature review
- Proforma of Healthy volunteers^{7& 8 & 9}
- Equipment :- Anemometer, Haemocytometer, viscometer, colorimeter, microscope.
- Cloths :- silk, mix, cotton etc.
- Number of Healthy volunteers In pilot study conducted in Shubhdeep Ayurved Mediocl college Indore: 05
- Consent form
- Reports

Method:

- Review detail about *Rakta* according to Ayurveda and modern science
- Sterilization of all Equipment
- Collection of blood
- Matching of blood color
- Staining of clothes
- Washing of cloth
- Haemoanalysis
- Video of the test and still pictures will be taken as a record for future comparison.
- Comparison of observation both technique in same group.

We carried out 5 pilot study to standardize all parameter. In standardization of the

procedure, we have planned to standardize various aspects of *Rakta Pariksha* namely. Site of collection, Colour, Volume, Type of Cloth, Staining time and duration, staining clear time & duration.

SELECTION CRITERIA:

Normal Healthy volunteers

Inclusion Criteria:

- Aged 21-40 years
- Male and Female
- Healthy Person

Exclusion Criteria:

- Age <21 and >40

- Suffering from any chronic illness
- Drug history of 1 months

Investigation :

- HB%
- TLC
- DLC
- ESR
- CT
- BT
- Blood Group

Proforma of Healty Volunteers :

1 Sama Dosh

S.N	DOSHA	PRAKRAT KARMA	PRAKRAT	VAIKRAT
1	Vataja	Utasaha		
		Uchavas		
		Niswasha		
		Chestha		
		Mal mutra pravartti		
		Dhatu gati sama		
2	Pittaj	Darsan		
		Pachana		
		Ushma		
		Kshudha		
		trashna		
		Deha maraduta		
		Prabha / kanti		
		Medha		
3.	Kaphaj	Snigdhatata		
		Shandhi bandhan		
		Sthiratvum		
		Gourav		
		Vrashtha		
		Bal		
		Kshama		
		Dhrati		
		Alobha		

2.Sama Dhatu

	DHATU	PRAKRAT KARMA	PRAKRAT	VAIKRAT
1	Rasa	Prinan		
		Tushti		

		<i>Rakta Pushti</i>		
2	Rakta	<i>Jeevan</i>		
		<i>Bal</i>		
		<i>Mans Pushti</i>		
		<i>Varna Prasad</i>		
3.	Mass	<i>Sarir Pushti</i>		
		<i>Medo Pushti</i>		
4.	Meda	<i>Sweda uttapatti</i>		
		<i>Dradhata</i>		
		<i>Asthi Pushti</i>		
		<i>Snigdhta</i>		
5.	Asthi	<i>Deha daran</i>		
		<i>Majja Pushti</i>		
6.	Majja	<i>Sarir Pushti</i>		
		<i>Asthi purna</i>		
		<i>Sukra Pushti</i>		
		<i>Bal Pushti</i>		
7.	Sukra	<i>Dhairya] priti , shourya] chavan</i>		
		<i>Dehabal uttapatti</i>		
		<i>Harsa uttapatti</i>		
		<i>Garva uttapatti</i>		

3 Sama Mal

S.N	MAL	PRAKRAT KARMA	PRAKRAT	VAIKRAT
1.	Purisha	<i>Upsthmbhan</i>		
		<i>Agni dharan</i>		
		<i>Vau dharan</i>		
2.	Mutra	<i>sarir kledan nirgaman</i>		
		<i>Vasti puran</i>		
3.	Sweda	<i>Twak snigdhata</i>		
		<i>Twak shukumarta</i>		

4 Samagni Pariksha

S.N	DOSA	AGNI	SYMPTOMS	YES/NO
i.	Tridosha	<i>Samagni</i>	<i>Bhukhta anna ka samay par pak</i>	

5 Kostha Pariksha

S.N	KOSHHA	LAKCHAN	YES / NO
1.	Madhyam kostha	<i>Guda ,Ikha, Doodh, Dahi, Kheer, khichdi,Ghee,Triphala ras ,Draksha ras , Garam pani pikar bhi samanya</i>	

Note : Healthy volunteer Assessment Criteria is more than or equal to 75 %

Analysis of Mean Table:

1. Drying time of cloths :

Mean of Normal water				
S.N	CLOTHS	ARTERY	VENOUS	CAPPILARY
1	Silk	38:12 min.	41:12 min.	41:11 min.
2	Mix	38:05 min.	37:21 min.	47:06 min.
3	Cotton	41:01 min.	44:22 min.	48:22 min.

Mean of Detergent water				
S.N	CLOTHS	ARTERY	VENOUS	CAPPILARY
1	Silk	43:13 min.	41:09 min.	43:10 min.
2	Mix	39:04 min.	37:55 min.	43:22 min.
3	Cotton	36:43 min.	42:01 min.	47:22 min.

2. Washing times of cloths :

Mean of Normal water				
S.N	CLOTHS	ARTERY	VENOUS	CAPPILARY
1	Silk	1:42 min.	1:10 min.	1:31 min.
2	Mix	1:00 min.	1:44 min.	1:15 min.
3	Cotton	1:34 min.	1:35 min.	1:12 min.

Mean of Detergent water				
S.N	CLOTHS	ARTERY	VENOUS	CAPPILARY
1	Silk	1:03 min.	1:25 min.	2:06 min.
2	Mix	2:20 min.	2:03 min.	2:21 min.
3	Cotton	1:02 min.	1:21 min.	1:29 min.

DISCUSSION: We have taken 5 test-subjects for 'pilot study'. According to proferma the amount of blood collected was 2-3 ml from Artery, Vein & Capillaries, respectively from each individuals. Duration noted for the drying of blood in the Arteries, Veins & capillaries is generally 35-50 mins. Veins blood drying the quickest, i.e. 37 mins than the other two. We've taken 3 types of Cloth (signature) to wash away the stain i.e. Silk, mixed & cotton. Since 2-3 mins are required to wash away the blood-stain from all the clothes, but mixed cloths blood stain gets washed away easily than others i.e. 1-2 mins in normal water & 2-3 minutes in detergent water. There are no such differentiable variations in hematological parameters from Atrial, Venous & capillary blood.

CONCLUSION: As per the proformma, Veins are more preferred for the extraction of blood as it has the quickest drying & washing time, Also extracting blood from capillaries & Artery can be cumbersome as that much blood is not available at-a-time in the capillaries and since venous blood is superficial & easier to collect, it is used for the further study. Since, according to the study the mixed cloth is best suited and normal water is preferred for best results for further study. There are no such differentiable variations in hematological parameters from Atrial, Venous & capillary blood. Hence, In accordance with the study carried above, the best suitable blood collecting site is Veins with appropriate volume 2-3 ml, cloth used must me mixed along with Normal water procedure time 11 am to 2 pm ,at room temperature.

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Corresponding Author:

Dr Harendra kumar Modi ,M. D. Scholar,
P. G. Department of Rog nidan evam
Vikrati vigyan, Shubhdeep Ayurved
Medical College & Hospital, Indore (M.P.)
Email: harendramodi.dm@gmail.com

Source of support: Nil
Conflict of interest: None
Declared

*Cite this Article as: Modi Harendra Kumar et al :
Standardiazation of Rakṭa Pariḡsha According to
Prakṛiti*