

TO FIND OUT THE PATTERN OF DEHAPRAKRITI AND NADI IN PATIENTS OF IRRITABLE BOWEL SYNDROME [IBS]

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ABSTRACT

Irritable Bowel Syndrome [IBS] is defined as a bowel motility disorder that might be influenced by psychological factors. It is heavily over shadowed by functional and psychological manifestations of a wide variety. It is observed that there is a need of psychotherapy and counselling to build up adjustment in the patient to his symptoms, besides pharmacological management. How same food, environmental factors and medicines have different inference over person by person. After having same disease management differs according to the patient's constitution. In *Ayurveda* we call this genetic makeup as *Deha Prakriti* which roughly denotes Genome as we know today. To emphasize the importance of pulse examination it has been cited that as Sitar is made-up of fine wires that emit out the various tunes when it is stricken, similarly pulse of the hand is sufficiently able to tell the various disease of body as their indicators.

KEYWORDS: IBS, Prakriti, Nadi.

INTRODUCTION

Irritable Bowel Syndrome [IBS] is defined as a bowel motility disorder that might be influenced by psychological factors. It is very common condition met with in clinical practice. It has vague presentation and it is confused with many specific diseases includes some forms of IBD. The main complaints of this syndrome are altered bowl function with or without abdominal pain, feeling of incomplete evacuation, weakness, insomnia, nervousness and anxiety etc. It is heavily over shadowed by functional and psychological manifestations of a wide variety. It is observed that there is a need of psychotherapy and counselling to build up adjustment in the patient to his symptoms, besides pharmacological management.

How same food, environmental factors and medicines have different inference over person by person. After having same disease management differs according to the patient's constitution. According to *Ayurvedic* texts such a constitutional makeup is formed at the time of fertilization. Modern literature also proves that everyone has unique genetic information. In *Ayurveda* we call this genetic makeup as *Deha Prakriti* which roughly denotes Genome as we know today.

To emphasize the importance of pulse examination it has been cited that as Sitar is made-up of fine wires that emit out the various tunes when it is stricken, similarly pulse of the hand is sufficiently able to tell the various disease of body as their indicators. The *Nadi Pariksha* is one part of *Ashtavidha Pariksha* used to examine disease. So physician is also advised to not to depend on pulse examination alone, But along its subsequently eyes tongue and urine also examined.

Present dissertation is dealt to find out the pattern of *DehaPrakriti* and *Nadi* in patients of Irritable Bowel Syndrome [IBS] at S.S. Sunderlal Hospital, Department of Kayachikitsa IMS, Banaras Hindu University Varanasi (U.P.).

REVIEW IN AYURVEDIĀ LITERATURE

Irritable Bowel Syndrome [IBS] is defined in Contemporary medicine as a bowel motility disorder that is modified by psychological factors. It is characterized by altered bowel function. Its clinical features are dyspepsia, gas formation, bloating, nausea, vomiting, headache, flashing, fatigue, dysuria. After continuous researches about pathogenesis of this psycho-physiological disturbance of the G.I. tract no single specific causative agent has been identified.

In *Ayurvedica* texts several gastrointestinal disorders are described through some clinical features of IBS which are comparable to some disorders like *Amlapitta*, *Vatika Grahani*, *Gulma*, *Atisara*, *Vishamagni*, *Pakwashayagata Vata* and *Gudgata Vata*. It is difficult to draw exact comparison with this modern disease and diseases in *Ayurvedic* texts. However IBS can be compared clinically to *Pakwashayagata Vata* and *Vatika Grahani*. Differential diagnosis is described in table no. 1 and table no. 2.

Differential diagnosis

Table No.1.

<i>Vatika Grahani</i>	<i>Pakwashayagata Vata</i>
- Dryness of mouth and throat.	- Intestinal sounds.
- Late digestion or indigestion.	- Pain in abdomen. -Generalised tympanitis.
- Auditory hallucination.	- Difficulty in urination.
- Pain in the thigh, side, and chest.	- Difficulty in defecation stool passed in less quantity.
- Sorrowful face and mind.	- Distension of abdomen associated with constipation.
- Feel better after meals.	- Low backache.
- Dryness of mouth and throat.	
- Late digestion or indigestion.	
- Tearing pain in the rectum while passing of hard or soft stool with mucus in high frequency.	

Table No. 2.

<i>Gudgatvata</i>	<i>Pravahika</i>
- Obstruction of stool and urine.	- Stool associated with mucus.
	- Tenesmus before defecation.
	- Less amount of stool.

Physiology of Digestion in Ayurveda

Function and place of action of all the five types of *Vata* are described in table no.3. Out of five types of *Vata*; *Prana*, *Samana* and *Apana Vata* have action in the G.I. tract specially to regulate *Gati* (Peristalsis).

Pranavata acts from *Mukha* to *Amasaya*, *Samanvata* is near to *Jathragni* and in *Srotansi* and *Apanavata* acts in the *Antra* and *Guda*.

The stability of *Pachkagni* is furnished by normal function of *Pranvata* and *Apanavata*. Separation of *Rasa*, *Mutra*, *Purisha* from the *Annarsa* is the function of *Samanavata*. Expulsion of stool is the function of *Apanavata*.

Pathological changes

In Irritable Bowel Syndrome [IBS] mainly stool consistency and frequency of bowel is abnormal. The frequency of motion is regulated by *Apanavata* and for the formation of stool is takes place by the role of *Pachkagni*, *Grahni*, *Pittadharakala*, and *Samanavata* within the *Annavahasrotasa*. After taking *Vatavardhaka Aahaara*, *Vihara Vata* is vitiated and affects *Pachkagni*, which leads to *Vishmagni*. Due to *Vegsandharana* (suppression of urge) vitiation or *Vimargagaman* of *Apanavata* takes place. Vitiating *Apanavata* causes vitiation of *Samanavata* and *PurishvahaSrotodusti*.

Due to *Vishmagni* and vitiated *Samanavata* there is formation of *Aam* in *Annavaha Srotasa* and so formation of *Aam-malotpatti* takes place. This *Aam-mala* changes the consistency of stool either it is hard (*Shushka Purisha*) or loose (*Bhinna Purisha*). Vitiating *Apanavata* comes in *Purishvaha Srotasa* and there is hyperactivity of *Apanavata* takes place. Due to result of it there is rumbling sound in abdomen and urge of frequent bowel motion in the feeling of incomplete evacuation. After all this the people pass stool either dry hard type with constipation or he may pass loose stool with diarrheal motion. After chronicity of the disease people have mixed type of symptoms. Due to all this the developed disease can be said as Irritable Bowel Syndrome [IBS]. *Samprapti* flow chart is illustrated in next page.

Ayurvedic concept of Deha Prakriti

Deha Prakriti denotes an individual's constitution characterized by his physic and temperament. *Prakriti* is the sum total of physic, physiology and psychology of an individual. It is fixed identified patterns of basic components of the individual which are responsible for the personality and constitution of an individual has become a matter for reaching consequence in solving various socio-medical problems.

It is believed and seen that the offspring of the same parent are not identical in their physical strength, intellectual development, and spiritual bent in their behaviour, temperament and reaction to various condition of environment this is because of the individualized *Prakriti*. Such an individualized categorization is conceived in *Ayurveda* in terms of the *Triguna* and *Tridosha* theories of *Ayurveda*.

Derivation

It is a feminine word in Sanskrit grammar derived from root '*Kr*' with addition of prefix '*Pra*' (*Pra+Kr+Ktin*). Thus *Prakriti* is the '*Pratham Kriti*' and is genetically determined.

Interpretation of term *Prakriti*

- Natural condition / state of anything.
- Origin source, material cause.
- A model, pattern, standard.

In *Ayurveda*: *Svabhava* (own state), *Iswara* (powerful), *Kala* (measure of time), *Yadrcha* (independence), *Niyati* (fate), *Parinama* (conclusion).

- State of equilibrium of basic components such as three *Doshas* is known *Arogya*, and derangement of these is called *Vyadhi* or disease.

Definition: The unique physical, psychological makeup of an individual that permanently affects his manner of thinking, feeling, and acting is known as *Prakriti*.

Classification: This constitution has been considered by the *Ayurvedic* scholars mainly from two aspects.

1. Genetic constitution (*Kala garbhasaya Prakriti*) it is unchangeable.
2. Acquired constitution (*Jatsarira Prakriti*) it is variable as per influence.

Primarily it is considered to be of two types based on *Tridosha* and *Triguna* respectively.

1. *Deha-Prakriti* (somatic constitution)
2. *Manasa-Prakriti* (psychic constitution)

Further classification of *Deha Prakriti* (By *Charaka Samhita*):

- A) Predominant: *Vataja Prakriti*, *Pittaja Prakriti*, *Kaphaja Prakriti*
- B) Dwandaj: *VataPittaja Prakriti*, *PittaKaphaja Prakriti*, *KaphaVataja Prakriti*
- C) *Sama Prakriti*

According to *Susruta Samhita*:

- A) *Parthiva Prakriti*
- B) *Apya Prakriti*
- C) *Agneya Prakriti*
- D) *Vayavya Prakriti*
- E) *Nabhasa Prakriti*

According to *Astanga Sangraha*:

- A) *Sattvika Prakriti*
- B) *Rajsika Prakriti*
- C) *Tamsika Prakriti*
- D) *Sattva-raja Prakriti*
- E) *Raja-tama Prakriti*
- F) *Sattva-tama Prakriti*
- G) *Samguna Prakriti*

In consideration of the three *Gunas* (*Satva, Raja, Tama*) the *Manasa Prakritis* are of three majors and 16 subtypes.

A) *Sattvika Prakriti*: *Brahma, Mahendra, Varuna, Kaubera, Gandharva, Yama, Arsha.*

B) *Rajasa Prakriti*: *Asura, Sarpa, Sakuna, Rakshas, Paisacha, Preta*

C) *Tamasa Prakriti*: *Pasava, Matsya, Vanaspatya*

Under influence of various environmental factors it is classified into:

1. *Jatipraskta*
2. *Kulapraskta*
3. *Desanupatini*
4. *Kalanupatini*
5. *Vayanupatini*
6. *Balanupatini*
7. *Pratyatmniyata*

Also human beings are categorised in terms of geographical, environmental and ecological consideration are *Anupa, Jangala, Sadharana.*

Characteristics of *Prakriti*

Vatika

1. Physic: Disproportionate and underdeveloped body, flat chest, prominence of veins and tendons minimum muscle tone, rough, dark pale dusty complexion; dry, cracked, rough, skin; dry, less lustred of hairs; less dense, thin eyelashes; rough nails; dry and dirty conjunctiva; minimum predominance of eyeball.
2. Physiological: Low appetite, disturbed sleep, quick gait, unstable activity, low longevity, poor digestion, irregular food intake, lesser thirst, hard stool, lower temperature, least vital capacity.
3. Psychological: Short memory, least will power, mentally unstable, least courage, least tolerance, least confidence, least boldness, least reasoning ability.

Pattika

1. Physic: Medium tendons and flabby physique, proportionate chest, maximum number of moles, medium muscle tone, fair and copper colour, complexion smooth, very soft, wrinkled skin, thin silky and brownish hair and eyelashes; reddish and soft nails.
2. Physiological: Good appetite and digestion, maximum mealing, medium sleep, maximum temperature, medium vital capacity, soft stool.
3. Psychological: Maximum memory, will power, mental stability and tolerance, good mental grasp, power of reasoning.

Kapha

1. Physic: Developed body built, spacious chest, minimum predominance of veins, tendons; minimum moles, maximum muscle tone, fair and bright complexion, soft and smooth skin, dark black, curly, soft, dense hair; dense, black eyelashes; bright nails.
2. Physiological: Good appetite, moderate digestion, low mealing, soft stool, lesser sweets, prolonged sleep, maximum vital capacity.
3. Psychological: Slow grasp; maximum will power, courage, confidence tolerance, boldness, seriousness.

Ayurvedic concept of Nadi Pariksha

The explanatory notes given on various movements of pulse are found in *Sharangdhara Samhita* flourished around 13th century A.D. As regards of pulse examination it is described in the third chapter of first part of *Samhita*. *Sharangdhara* has included pulse examination in his work as a mean of diagnosis.

Next in around 16th century A.D. a famous physician *Bhava-Prakasha* was flourished. In this text about pulse examination is described in sixth specific subdivisions of the first part under the heading *Rogipariksha*. Later on in middle of 16th century A.D. among the existing work in *Ayurvedic* medicine *Yogratnakara* occupies its position. It had concerned the description about pulse examination as means of diagnosis and it is described in first chapter of the book under the heading *Rogipariksha*.

Derivation: The term *Nadi* is derived from 'Nad+nich+in; meaning of that is a hollow pipe like structure as like arteries and veins in the body.

Synonyms: *Dhamini, Tantuki, Jivitajna, Dhara, Hinshra, Snayu.*

Pulse examination

In *Sharangdhara* description it is condensed in eight *Shlokas*. For anatomical position of *Nadi* artery found at the root of thumb that ascertains the healthy and diseased condition of body by feeling the movement of it.

1. Method

Physician should examine by his right hand the pulse below the left thumb in case of female and in right hand in case of male. Before that Physician should attains its state of mental stability.

It should be examined in first three hours of morning as allied aspect of Pulse examination. First the elbow of patient be slightly flexed to left and the wrist slightly bent to the left with the fingers distended and dispersed with the use of index, middle, and ring finger. Physician examines himself the pulse repeatedly for three times by giving and releasing the pressure alternately over it. This way the Physician may able to know the good and bad prognosis of the patient.

2. Involvement of Dosha

Vataja- Resembles to movement of serpent and leech assumes to curvilinear motion.

Pittaja- Resembles to sparrow, crow frog jumping like

Kaphaja- Resembles to swan (*hansa*) pigeon.

Sannipataja- Resembles lark, quail, patrige, *sottalagati*

3. Pulse in different condition

Types of pulse	Characteristics of pulse	Ayurvedic terms
- Healthy pulse.	- Steady and strong.	- <i>Sthira</i> and <i>balawati</i>
- Good hunger and appetite.	- Light to touch, tremulous fast.	- <i>Laghwi, Chapala, Vegawati</i>
- Satisfaction after hunger	- Steady	- <i>Sthira</i>

4. Mental state

Lust and anger- Rapid pulse

Anxiety and fear- Feeble

5. Pathological state

Poor appetite and cachaxia- Slow

Profound intoxication- Heavy

Full of blood- Hard to touch and heavy, moderately warm

Fever- Fast

6. Precaution

The pulse should not be examined just after bath, in hungry, thirsty state, during sleep, just after awakening and the patient has anointed with oil.

REVIEW OF CONTEMPORARY LITERATURE

Introduction: The term Irritable Bowel Syndrome [IBS] denotes a variety of disorder of enteric functions manifested in chronic or recurrent fashion at times of life stress and emotional tension. It is totally functional and probably most common gastrointestinal disorder. Symptoms in Irritable Bowel Syndrome [IBS] may be either continuous or episodic. They appear to be related to excessive motor activity of gut or hyperaction of Para-sympathetic and hormonal stimuli.

Synonyms: Various terms has used from time to time for the disease. The terms are such as Irritable Colon, G.I. Neurosis, Colonic Neurosis, Spastic Colitis, Dyssynergia of colon.

Clinical Features

Usually the patients are giving history of chronic constipation or diarrhoea or both alternatively. The diarrhoea usually occurs in the morning, after passage of two or three stools with or without mucus. Some patients are give features of abdominal pain around umbilicus. These patients are also giving history of cramping at calf region. Other varieties of complaints are heartburn, excessive belching, fullness of abdomen, low backache, incomplete evacuation, palpitation with constipation or diarrhoea.

The patients of IBS are of three variants:

- a) Chronic abdominal pain with constipation [IBS-C].
- b) Chronic intermittent diarrhoea without pain [IBS-D].
- c) Mixed type (History of alternate diarrhoea or constipation) [IBS-M].

It is not a life threatening illness, but it causes great distress to patient and feeling of helplessness, frustration. The male suffers more than females in this disease.

Personality character

Apart from these, patients also shows some psychiatric features like anxiety, hysteria, and depression. About these patients complaining of severe illness but on examination there is no gross abnormality detected or very minimal disorder; it's one more sign is there is no significant loss of weight.

Abdominal pain: Abdominal pain is present at time of defecation in most of the patient but its location is variable. It may be felt in the hypogastriam, the lower quadrant, or in peri-umbilical area. Its time of onset and duration are also variable but it may be sharply aggravated by intake of food and usually it is relieved by a bowel movement, the passage of flatus, or belching.

Constipation: This is most common complaint among the people. It is described as infrequent passage of extremely small dry hard stool, often associated with a sense of abdominal distension or excessive passage of flatus, is the more common disturbance of stool frequency. Both in children and adults overlong retention of stool in the vigorously contracting sigmoid colon leads to excessive absorption of water and passage of usually small and hard faecal masses.

Diarrhoea: It is steadily or intermittently present. The stools are usually only semi-liquid or mushy in consistency and though often attended by great urgency and they are non fatty and may be quite small in volume. The bowel movement occurs most frequently just before and after breakfast it may contain mucus.

Differential diagnosis

Irritable Bowel Syndrome [IBS] must be excluded from Ulcerative Colitis. In Ulcerative Colitis there is gross change in the mucosal layer of colon there may be ulceration or granulomatous formation and maybe there is micro abscess.

Management: The management of the patients of Irritable Bowel Syndrome [IBS] remains unsatisfactory. The main object of the therapy is to teach the patient. And it is also important to reassure the patient that he has no severe organic bowel disease. Teach the patient to minimise the psychological factors which cause irritation.

The total management is divided into three groups

A) Dietary management in IBS

- a. High residue diet with added bran.
- b. Coarse vegetable.
- c. High fibrous fruit.
- d. Low residue bland diet avoiding milk and its product, in patients of diarrhoea symptoms.
- e. Chilli spices vegetable with hard stools avoided.

B) Drugs: A combination of tranquiliser antispasmodic is more effective in treating Irritable Bowel Syndrome [IBS] than any single agent.

C) Psychotherapy: Psychotherapy has for many years been considered to be in the treating of medical condition with a psychological component. Often there is need to educate the patients about their problems and to make them understand that there is no serious organic disorder sometimes there is need of close personal interview to know the cause of mental stress and strain. And then to explain the relation of the mind with colon in this disease.

Body Constitution: The characteristics of the body including the mode of performance of function that determined by the genetic biochemical and physiologic endowment of the individual and modified in great measure by environmental factors.

This can be studied under three classes Physic, temperament, and psychology.

On the basis of physic three types of constitution are found as stated by William Herbest Sheldon in 1940.

I. Ectomorph: An ectomorph is a typical skinny guy; it has little build with small joint and lean muscle. Usually ectomorphs have long thin limbs with stingily muscles; shoulder tends to be thin with little width. Ectomorph is very hard to gain weight. They are usually tall, fragile, flat chested and delicate.

II. Mesomorph: It has a large bone structure, large muscle build up. Mesomorph is best body type; it is hard rugged, triangular athletically built and good positive.

III. Endomorph: The endomorph body type is solid and generally soft. It has thick arm and legs muscles are strong.

On the basis of temperament:

- I. Viscerotonic:** Pattern of temperament that is marked by predominance of social over intellectual or physical factors. It has friendliness and affection love of food sociability general relaxation.
- II. Somatotonic:** Pattern of temperament that has aggressiveness, love of physical activity, vigour and alertness.
- III. Cerbrotonic:** This pattern is marked by intellectual factors by exhibition of sensitivity, introversion and shyness.

On the basis of psychae

- I. Pykic:** A person who was born to manage lead and use the people. An ideal manager, managing by intelligence and senses. He never makes eye contact. It is social loves food and pleasure.
- II. Athletic:** This type is mix of asthenic and pykinic types. This type can manage or be managed due to its body and senses. They have usually angular hand and fingers. These are active, social, reckless, and aggressive.
- III. Asthenic:** A character that always being affected, being managed and used by others. They usually have spoon or sharp fingers. They are usually withdrawn, sensitive, and emotional and get quickly old.

Pulse examination: A pulse represents the tactile arterial palpation of the heartbeat by trained fingertips. The pulse may be palpated in any place that allows an artery to be compressed against a bone. Pulse is equivalent to measuring heart rate this is called sphygmology.

Sites: Carotid artery, radial artery, femoral artery, popliteal artery etc.

Methods: Commonly the radial pulse is measured using three fingers this has a reason- The finger closest to heart is used to occlude the pulse pressure.

- Middle finger is used to get a crude estimate of blood pressure.
- Distal finger is used to nullify the effect of the ulnar pulse as the two arteries are connected via the palmer arch.

Through this method only systolic blood pressure can be determined by a trained observer but diastolic blood pressure is unobservable occurring between two heartbeats.

Physiology: Pressure waves generated by the heart in systole move the arterial wall. Forward movement of blood occurs when the boundaries are pliable and compliment. The heart rate may be greater or lesser than the pulse rate depending upon physiologic demand.

Characteristic of pulse

A) Rate: Normal pulse rates at rest in beat per minute-

New born (0-3months)	Infants (3-6months)	Infants (6-12 months)	Children (1-12years)	Children adults and seniors	Well trained adult and athletes
100-150	90-120	80-120	70-130	60-100	40-60

The pulse rate can be used to check overall heart health and fitness level. Generally lower is better, but bradycardia can be dangerous. Symptoms of a dangerously slow heart beat include weakness, loss of energy, and fainting.

B) Rhythm: A normal pulse is regular in rhythm and force. An irregular pulse maybe due to sinus arrhythmia, ectopic beats, atrial fibrillation etc.

- i. Regular intermittent- Pulsus bigeminus, 2° AV block.
- ii. Irregular intermittent- Atrial fibrillation.

C) Volume: Degree of expansion (amplitude) displayed by artery during diastolic and systolic state is called volume.

Patterns: Several pulse patterns have clinical significance.

- i. Pulsus alternans: An ominous medical sign that indicates progressive systolic heart failure. Examiner notes a pattern of strong pulse followed by weak pulse respectively.
- ii. Pulsus bigminus: Pair of hoof beat within each heartbeat.
- iii. Pulsus Bisferins: Fingertips will observe two pulses to each heartbeat.
- iv. Pulsus Tardus: Due to stiff aortic valve in tactile pulse slower than normal rise is created.
- v. Pulsus Paradoxus: Condition in which during inspiration missing heat beat is observed.
- vi. Tachycardia: Elevated resting heartbeat.
- vii. Pulsatile
- viii. A collapsing pulse is a sign of hyper dynamic circulation.

MATERIAL AND METHODS

The object of the present study is to find out the pattern of *Deha Prakriti* and *Nadi* in clinically diagnosed patients of IBS. Methods are as follows:

- a) Selection of patients.
- b) Determination of *Prakriti*.
- c) Determination of *Nadi*.
- d) Assessment of *Agni-Bala*.
- e) Assessment of *Oja-Bala*.
- f) Patient case record with treatment given.

1. Selection of patients: The patients for the present study 100 in numbers were selected randomly from the outdoor patient of *Kayachikitsa S.S. Hospital IMS Banaras Hindu University Varanasi (U.P.)* during the time period from March 2016 to December 2016. Following are the basic line of features for the screening of the patients, i) No major loss of weight, ii) Feeling of incomplete evacuation, iii) Altered bowel habit diarrhoea or constipated motion or both, iv) Abdominal pain, v) Symptoms lasts for more than six months, vi) After rule out for inflammatory disease through radiological finding of abdomen.

2. Determination of *Deha Prakriti*: The *Deha Prakriti* was assessed in terms of the predominance of the three doshas i.e. *Vata*, *Pitta*, and *Kapha* and *dwandaj Prakriti* as *Vatapitta*, *Pittakapha*, *Kaphvata*. The criteria are adopted as per *Ayurvedic* text.

3. Determination of *Nadi Pariksha*: For assessment of *Nadi Pariksha* radial pulse of patient is examined and expressed on the basis of three factors; Rate, amplitude, and volume. For male patient his right hand examined and for female her left hand is examined.

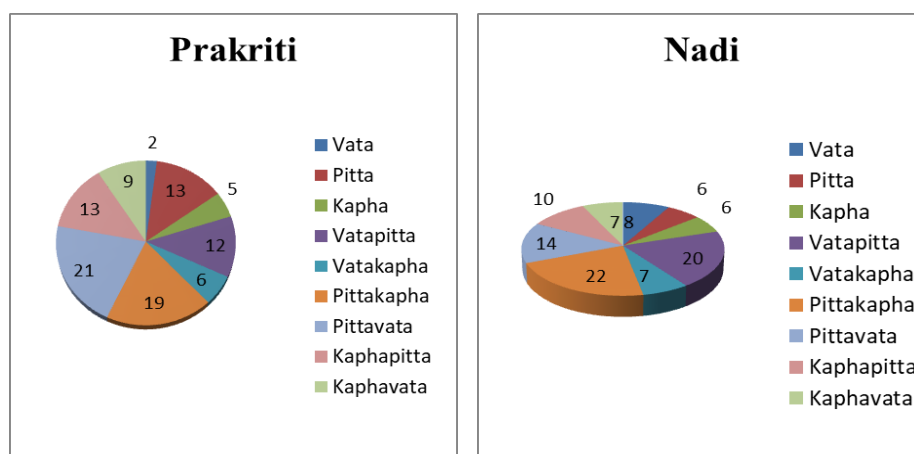
The interpretations are as follows

- i. *Vata Nadi*: Rate↑↑, amplitude is normal, volume↓↓.
- ii. *Pitta Nadi*: Rate is normal, Amplitude ↑↑ is dominant feature.
- iii. *Kapha Nadi*: Volume↑↑, rate↓.
- iv. *Vatapitta Nadi*: rate↑, amplitude↑.
- v. *Pittakapha Nadi*: amplitude↑, volume↑.
- vi. *Kaphvata Nadi*: volume↑, Rate↑.

4. Assessment of Agni-Bala: In majorly patient approached to us diagnosed as *Vishamagni*, some of them with early diagnosis have *Mandagni*.

5. Assessment of Oja-Bala: The patients with long run of disease show features of *Ojovishransha*, it is dominant in maximum number of cases. In newly diagnosed patients features of *Ojovyapada* are seen.

6. Patient case record: 100 patients were registered who came to OPD of S.S. Sunderlal Hospital, Department of Kayachikitsa IMS, BHU Varanasi (U.P.).



OBSERVATION AND RESULTS

The observations are based on conceptual study and literature survey to identify an appropriate clinical correlation for Irritable Bowel Syndrome [IBS] as described in *Ayurveda*. Clinical study on 100 cases of Irritable Bowel Syndrome [IBS] vis-a-vis *PakwasayagataVata* among the patient population attending S.S. Hospital BHU Varanasi (U.P.).

A) Distribution of age: Out of 100 cases of IBS studied in which

Sr. No.	Age Group	No. of Patients	Percentage
1	1-20 year	7	7%
2	21-40 year	49	49%
3	41-60 year	30	30%
4	61-80 year	14	14%

B) Distribution of Sex: 100 IBS cases were selected in clinic. Out of 100 cases 82% were male and 18% were female.

Sr. No.	Sex	No. of Patients	Percentage
1.	Male	82	82%
2.	Female	18	18%

- C) **Area of domicile:** Out of 100 cases 72% cases are from U.P. state from various places such as Varanasi, Gazipur, Ballia, Azamgarh, Jaunpur, Mau, Mugalsarai, Lalganj, Vavatpur, Mirzapur, Dharauli, BHU, Dafi, Kusinagar, Aurai, Ramnagar, Bhadohi, Mirzamurad, Ahraura, Devariya. 26 % cases are from Bihar state from places Sasaram, Ara, Baksar, Patna, kaimur, Sobar, Karahgar and 1% from Madhyapradesh (Maihar) and 1% from Karnataka state.

Sr. No.	State/ District	No. of Patients	Percentage	
1.	(U.P.)	Varanasi	24	24%
		Gazipur, Ballia Azamgarh Jaunpur Mau Muglsarai Lalganj Vavatpur Mirzapur Dhaarauli BHU Dafi Kusinagar Aurai Ramnagar Bhadhohi Mirzamurad Ahraura Devariya	48	48%
2	Bihar	Sasaram Ara Baksar Patna Kaimur Sobar Karahgar	26	26%
3	M.P.	Maihar	1	1%
4	Karnataka	Karnataka	1	1%

- D) **Marital status:** It showed that out of 100 cases of IBS 85% were married and 15% were unmarried.

Sr. No.	Marital status	No. of Patients	Percentage
1.	Married	85	85%
2.	Unmarried	15	15%

- E) **Seasonal incidence:** Total 100 cases are recorded from March 2016 to December 2016 out of which 68% cases are in *Adankala*. In *Vasanta Ritu* 15% cases are recorded, and 54% cases are in *Greeshma Ritu*. 31% are in *Visargkala*. In *Varsha Ritu* 18% cases are recorded, 4% cases are in *Sharada Ritu*, and 9% cases are recorded in *Hemanta Ritu*.

Sr. No.	Period Of registration	Ritu	No. of Patients	Percentage
1.	<i>Adankala</i> (March-July)	<i>Shishir</i>	0	0%
		<i>Vasanta</i>	15	15%
		<i>Greeshma</i>	54	54%
2.	<i>Visargkala</i> (August-December)	<i>Varsha</i>	18	18%
		<i>Sharada</i>	4	4%
		<i>Hemanta</i>	9	9%

- F) **Assessment of Prakriti:** Among 100 cases there was 9 variants are recorded in which 2% cases are of *Vata Prakriti*, 13% cases are of *Pitta Prakriti*, 5% cases are of *Kapha Prakriti*, 12% cases are of *Vatapitta Prakriti*, 6% cases are of *Vatakapha Prakriti*, 19% cases are of *Pittakapha Prakriti*, 21% cases are of *Pittavata Prakriti*, 13% cases are of *Kaphapitta Prakriti*, 9% cases are of *Kaphavata Prakriti*.

Sr. No.	Prakriti	No. of Patients	Percentage
1	<i>Vata</i>	2	2%
2	<i>Pitta</i>	13	13%
3	<i>Kapha</i>	5	5%
4	<i>Vatapitta</i>	12	12%
5	<i>Vatakapha</i>	6	6%
6	<i>Pittakapha</i>	19	19%
7	<i>Pittavata</i>	21	21%
8	<i>Kaphapitta</i>	13	13%
9	<i>Kaphavata</i>	9	9%

- G) **Assessment of Nadi:** Among 100 cases there was 9 variants are recorded in which 8% cases are of *Vata Prakriti*, 6% cases are of *Pitta Prakriti*, 6% cases are of *Kapha Prakriti*, 20% cases are of *Vatapitta Prakriti*, 7% cases are

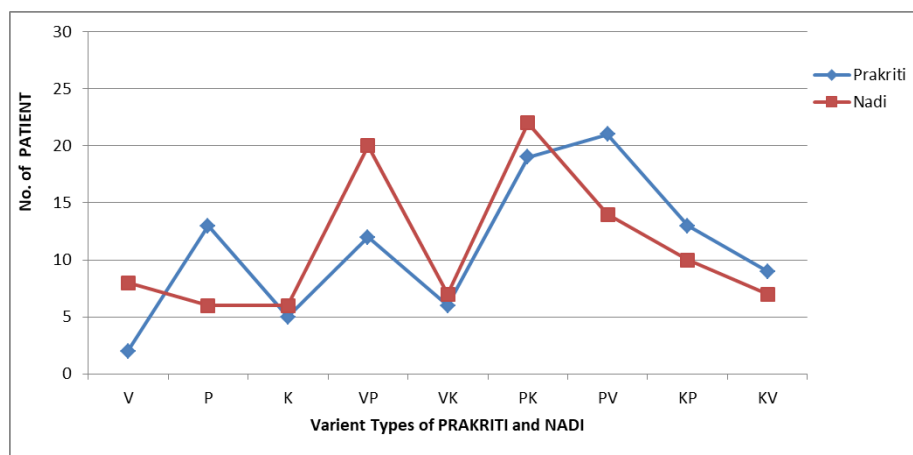
of *Vata* prakriti, 22% cases are of *Pittakapha* prakriti, 14% cases are of *Pittavata* prakriti, 10% cases are of *Kaphapitta* prakriti, 7% cases are of *Kaphavata* prakriti.

Sr. No.	Nadi	No. of Patients	Percentage
1	Vata	8	8%
2	Pitta	6	6%
3	Kapha	6	6%
4	Vatapitta	20	20%
5	Vata	7	7%
6	Pittakapha	22	22%
7	Pittavata	14	14%
8	Kaphapitta	10	10%
9	Kaphavata	7	7%

H) **Assessment of Agni-Bala:** In majorly patient approached to us diagnosed as *Vishmagni*.

I) **Assessment of Oja-Bala:** The patients with long run of disease show features of *Ojovishransha*, it is dominant in maximum number of cases.

J) **Correlative graph of NADI and PRAKRITI in 100 cases of IBS**



DISCUSSION

Despite the frequency with which patients are suffering from these functional abdominal diseases and inspite of continuous research, the aetiology and pathophysiology is yet hardly understood. Among the various probable aetiological factors, psychological factors appear to be major one and it regarded as psychosomatic disorder related to life stress some other etiological factors include hereditary, lactose intolerance, constipation, climate, and environmental, dietary habits, also have a major influence on it. It is supposed high fibre content increase the stool weight and reduces the intestinal transit time. Most of the patients are unemployed.

Among the several GIT disorder described in *Ayurveda Pakwasayagata* Vata can be compared with the Irritable Bowel Syndrome [IBS]. When vitiated Vata remains in *Pakwasaya* the disturbed Vata give rise to rumbling sound in the intestine, piercing pain at the region of the umbilicus, scanty and painful urination and purgation or entire suppression of urine and stool and pain in the coccygeal region. Apart from that several symptoms and sign of *Vatika Grahni* are closer to it but certain symptoms and aetiology are far away from the correlation.

Unlimited desires in the mind are responsible for the disease. Basic path-physiology of the disease is bowel motility. It is not a life-threatening illness causes great distress to the patient and felling of helplessness and frustration.

On using antistress, demulcent, drugs with the drug which can reduce gut motility shows better result such as *Bilva Choorna*, *Aswagandha Choorna*, and Tab Normaxin.

It is believed that gut flora is also disturbed so after using Cap Gutex patient shows positive improvement at some extent.

Prakriti is examination of physique and psyche of a healthy person but here it is examined in all patients of Irritable Bowel Syndrome [IBS].

SUMMARY AND CONCLUSION

The object of the present study is to find out the pattern of *DehaPrakriti* and *Nadi* in clinically diagnosed patients of Irritable Bowel Syndrome [IBS] and to study the response of a regimen to improvement to relieve the symptoms.

1. Irritable Bowel Syndrome [IBS] is a fairly common clinical condition found in the clinical practice. This syndrome, besides its clinical features is surrounded with many functional and psychological manifestations and also managed by psychosomatic approach.
2. Though it is difficult to identify one single disease described in *Ayurvedic* text, tentatively *Pakwasayagata Vata* may be considered as an appropriate clinical correlate for Irritable Bowel Syndrome [IBS].
3. Basic pathophysiological abnormality in the Irritable Bowel Syndrome [IBS] is hyper or hypo-motility of the gut. So in addition with pharmacological intervention, Yogic exercises were advised also to rehabilitate the gut motility and also to provide mental relaxation and adjustment and to educate them about syndrome. Life style modification is considered the sheet anchor of management of Irritable Bowel Syndrome [IBS].
4. Most of the patients were markedly anxious and depressed. Irritable Bowel Syndrome [IBS] is more common in males than females and most of them are married.
5. Mostly age group relies under middle aged person from 21 to 60 year.
6. In *Deha prakriti* the dominancy of the patients is of *Vatapitta* and *Pittakapha* type. About *Nadi Pariksha* most of them have *Vatapitta* and *Pittakapha* type of *Nadi*. In variant types of *Prakriti* and *Nadi* the *Kaphaja*, *Vatakaphaja*, and *Kaphvataja* type have very similar in number after observation. Thus in Irritable Bowel Syndrome [IBS] patients *Deha Prakriti* and *Nadi* Pattern have positive correlation.
7. Higher number of patients had *Vishmagni* and show features of *Ojovishransha* and very less number of cases or earlier diagnosed cases had features of *Mandagni* and *Ojovyapada*.
8. The number of cases markedly increased in Summer season or *Greeshma Ritu*.

BIBLIOGRAPHY

1. Charaka Samhita of Agnivesh, Charaka-Chandrika, Hindi commentary, by Dr. Brahmanand Tripathi, VolumeI and VolumeII, Chaukhambha Surbharti Prakashan, Varanasi 1996.
2. Charaka Samhita of Agnivesh, Ayurvedadipika, Hindi commentary, BN Tripathi, Chaukhambha Surbharti Prakashan, Varanasi 2009.
3. Charaka Samhita; with Vidyotini Hindi- commentary by Pt. Kashi Nath Shashtri, Pub by Chaukhambha Sanskrita, Varanasi; Part 1, 1st edi. 1969, Part 2, 1st edi. 1970.
4. Chakrapani: Ayurveda dipika commentary over charaka Samhita.
5. Shusruta Samhita of Susruta, editor G.D.Singhal, co-authers K.R. Sharma, Jyotir Mitra, K.P. Shukla, introduction by Prof. Ram Harsh Singh, Part I, II, III Pub by Chaukhambha Sanskrita Pratishthan, Delhi 2nd edition 2007.

6. Shushruta Samhita with Ayurveda Tatva Sandipika commrntary by Kaviraj Ambikadutta Shashtri, Pub. By Chaukhambha Sanskrita Sansthan Varanasi reprint 2014.
7. Jadavaji Trikamji, editor, commentary, Nibandh Sangrah of Dalhana on Sushruta Samhita, Pub by Chaukhambha Surbharti Publication 2007.
8. Ashtanga Hridaya, Vagbhat, Hemadri commentary, AM Kunte; Pub by Chaukhambha Surbharti Prakashan, Varanasi, reprint edition 2001.
9. Astanga Hrdyam of Srimadvagbhata 'Nirmala'hindi commentary by Dr. Brahmanand Tripathi.
10. Kaya Chikitsa Volume 1st and Volume 2nd, Prof.R.H.Singh, Pub by Chaukhambha Surbharti Prakashan, Varanasi.
11. The Holistic Principles of Ayurvedic Medicine; by Prof. R.H. Singh Pub by Chaukhambha Sanskrita Pratishthan, Delhi; 1st edition reprint 2003.
12. Evidence Based Practice in Complementary and Alternative Medicine; by Prof. S. Rastogi Editor, and F. Chippelli, M.H. Ramchandani, R.H.Singh, Co-editors.
13. Scientific Foundation of Ayurveda by Dr. H.S. Palep; Pub by Chaukhambha Sanskrita Pratishthan, Delhi; 1st edition 2004.
14. Bhaisajya Ratnawali; commentary by Jaydev Vidyalkar; Pub by Motilal Banarasi Das. Varanasi, 6th edi. 1953.
15. Nadi Vijana (Ancient Pulse Science) by Sarva Dev Upadhyay; Pub by Chaukhambha Sanskrita Pratishthan, Delhi; 1st edition 1986.
16. Sarangdhara Samhita: Baidyanath Ayurveda Ltd.
17. Sharangadhara Samhita, Brahmanand Tripathi, editor, Pub by Chaukhambha Sanskrita Sansthan Varanasi 2007.
18. Saragdhara Darpan: Dr. Bhrgupati Pandey, Pub by Madhu, Varanasi; 1st edi. 1989.
19. Madhava Nidan: Rogovinisaya of Sri Madhavakara by G.D. Singhal S. N. Tripathi K.P. Sharma, Pub by Chaukhambha Sanskrita Pratishthan Delhi 2nd edi. 2008.
20. Bhava Prakash: commentary by Shri Bhrama Shankar Mishra.; Pub by Chaukhambha Sanskrita Series office, Varanasi; Part 1, 5th edi. 1969, Part 2, 3rd edi. 1961.
21. http://en.m.wikipedia.org/wiki/Irritable_bowel_syndrome
22. http://en.m.wikipedia.org/wiki/Somatotype_and_constitutional_Psychology
23. <http://en.m.wikipedia.org/wiki/Pulse>
24. Concept of Ama in Ayurveda; by Dr. M. Srinivasulu, Pub by Chaukhambha Sanskrita Series office, Varanasi; 2010.