

Conceptual study on osteoporosis and gastrointestinal tract symptoms with reference to *purishdhara kala sa eva asthidhara kala*

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Abstract:

Introduction – Study of *Kala* is important in study of human physiology along with anatomy. When either of two functions is disturbed pathology occurs & so for the treatment purpose, study of *Kala* is important¹.

The correlation between *Purishdhara kala* as *Astidharakala* has been mentioned in *Sushrut Samhita* by *Dalhan* commentary. This correlation has been considered at multiple instances in general learning & in usage of Ayurvedic treatment (both *Shaman* & *Shodhan Karma*)².

In Modern Science, the Gastroenterologist many a times come across osteoporosis or osteopenia in patient with persistent gastrointestinal symptoms diseases. Gastrointestinal disorders can lead to significant impact on bone health³.

This is an attempt to assess association between Osteoporosis and

Gastrointestinal tract symptoms with reference to *Purishdhara Kala* as *Asthidhara Kala* concept.

The Knowledge of *Purishdhara Kala Sa Eva Asthidhara Kala* will throw light on the treatment Principles of Osteoporosis.

Aim – Conceptual study on Osteoporosis and Gastrointestinal Tract Symptoms with reference To *Purishdhara Kala Sa Eva Asthidhara Kala*

Objectives – To Review *Purishdhara Kala Sa Eva Asthidhara Kala* in both Ayurvedic and modern text.

Material and Methods – All the Ayurvedic and Modern literature and contemporary texts including websites will be reviewed.

Discussion – The review of *Purishdhara Kala as Asthidhara kala* from the purview of modern aspect will be discussed.

Conclusion – Proper conclusions related to the conceptual study on osteoporosis and gastrointestinal tract symptoms with reference to *Purishdhara Kala Sa Eva Asthidhara Kala* will be drawn.

Key Words – *Purishdhara Kala, Asthidhara Kala, Osteoporosis*

- ☉ **Introduction:** There are seven *Kala*, situated between (*Dhatu* and *Ashaya*). They define the limits between particular system and their limiting membrane with other systems (*Dhatu* and *Ashaya*)⁴.

Study of *Kala* is an important in study of human physiology along with anatomy. When either of two functions is disturbed pathology occurs & so for the treatment purpose, study of *Kala* is important¹.

Out of 7 *Kala* mentioned, 5th one is *Purishdhara kala*, which being situated in *Pakvashaya* (Intestine), separates *Mala* (waste products, stool especially) from the food material after its digestion.

Ayurveda Science introspects several things by analysis of several different concepts mentioned in different *sthanas* of the Ayurveda classics. The right interpretation of the concepts can be done by compiling, analyzing and then verifying the different references found in different contexts. Likewise, the concept of *Kala* mentioned by *Acharya Sushruta* in *Sharirsthana* can be interpreted and understood better by referring to description of *Kala* in *Saptama Vega* of the

Snake bite mentioned in *Sushruta Kalpasthana*⁵.

Correlation between *Purishdharakala* as *Astidharakala* has been mentioned in *Sushrut Samhita* by *Dalhan* commentary.

This correlation has been used at multiple instances in general learning & also usage of Ayurvedic treatments (both *Shaman & Shodhan Karma*).

In Modern Science, the Gastroenterologist may come across osteoporosis or osteopenia in patient with persistent gastrointestinal diseases. Gastrointestinal disorders can lead to significant impact on bone health³.

This an attempt to assess association between Osteoporosis and Gastrointestinal tract symptoms with reference to *Purishdhara Kala* as *Asthidhara Kala* concept.

- ☉ **Aim** - Conceptual study on Osteoporosis And Gastrointestinal Tract Symptoms with Reference To *Purishdhara Kala Sa Eva Asthidhara Kala*

- ☉ **Objectives** –

1. To review *Purishdhara Kala Sa Eva Asthidhara Kala* from Ayurvedic text

2. To study modern factors related to Osteoporosis And Gastrointestinal Tract Symptoms

● **Materials and methods:** Review of Modern Literature and contemporary texts including websites about the diseases reviewed and documented in study under following headings:

1. **Kala Sharir** - *Kala* reflects the structural & functional boundaries of organs
2. **Purishdhara Kala** - Out of 7 *Kala* mentioned, 5th one is *Purishdhara kala* situated inside the alimentary tract, commencing from *Yakrut* (Liver) and the *Antra* (Intestine), this *Maladhara kala* separates the *Mala* (Faeces) at the *Unduka* (caecum).
In *Sushrut samhita kalpasthan* Chapter-4 i.e. 'Sarpadashtavishavidnyayniy', *Acharya Sushrut* has recited *Kala* in detail in the context of *Saptavega* caused due to *Sarpadansha*.
3. **Asthidhara Kala** - *Acharya Dalhana* has commented the following points regarding *Kala*.

Here *Dalhana* has considered the meaning धात्वन्तरेषु as धातुमध्येषु (In the *Dhatu*). *Acharya Sushrut* has previously described the *Kala* in *sharirsthan* गर्भव्याकरण अध्याय (Ref- Su.Sh.Sharirsthan Dalhan tika 4/40)

Acharya Dalhan has opined that *Dhatu* is related to *Dharan* & like the *Saptadhatu* he has also mentioned कफ, पित्त, पुरीष as धातु, While explaining *Saptavega*, *Acharya Dalhan* has given following Explanation –

(Ref- Su.Sh.Sharirsthan Dalhan tika 4/5)

1. रक्तधरा कला-2nd *Kala*, Situated in intermediary region between *Rasa* & *Rakt Dhatu*
2. मांसधरा कला-1st *kala*, Situated in intermediary region between *Rakta* & *Mansa dhatu*
3. मेदोधरा कला- 3rd *Kala*, Situated in intermediary region between *Mansa* & *Meda Dhatu*
4. श्लेष्मधरा कला – 4th *Kala*, Situated in intermediary region between *Meda* & *Kapha dhatu*
5. पुरीषधरा कला- 5th *Kala*, Situated in Intermediary region between *Kapha* & *Purish Dhatu*
6. पित्तधरा कला - 6th *Kala*, Situated in Intermediary region between *Purish* & *Pitta Dhatu*
7. शुक्रधरा कला- 7th *Kala*, Situated in Intermediary region between *Pitta* & *Shukra Dhatu* .⁵

When there is *Kleda* formation in the intermediary between two *Dhatus* due to the *Ushma* of the respective *Dhatus*, the process of *Parinaman* (Transformation) leads to formation of *Kala*

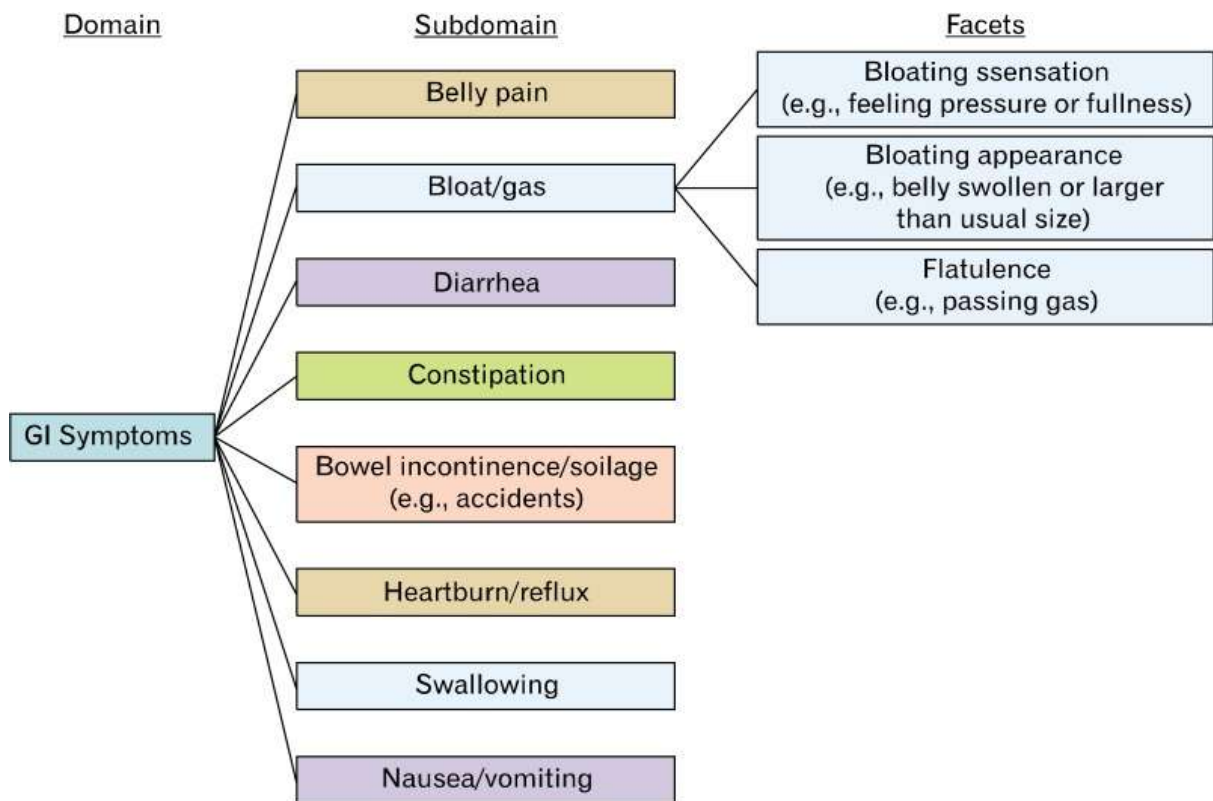
According to this definition *Purishdhara Sa Eva Asthidhara Kala* forms the *Kleda* present between *Dhatus* i.e *Kapha* and *Purish* ⁶ (Ref - अष्टांगहृद्य शारीरस्थान सर्वांगसुंदर आयुर्वेदरसायन टीका ३ / ९)

Therefore, considering the above points *Acharya Dalhan* said that it would not be wrong to consider⁷ (Ref- सुश्रुत संहिता कल्पस्थान ४ / ३९) पुरीषधरा कला as अस्थिधराकला

As the correlation between *Purishdharakala* as *Astidharakala* has

been mentioned in *Sushrut Samhita* by *Dalhan* commentary.

Gastrointestinal Tract symptoms - Heartburn, indigestion/dyspepsia, abdominal pain, bloating and diarrhoea/constipation are common in the community⁸.



4. Osteoporosis - Osteoporosis is a disease in which bones deteriorate or become brittle and fragile due to low bone mass and bone tissue loss.

1 in 2 women and up to 1 in 4 four men who are over age 50 will break a bone due to osteoporosis⁹.

Discussion – Several Research works were also reviewed for this discussion purpose.

Concept of *Kala* mentioned by *Acharya Sushruta* in *Sharirsthana* can be

interpreted and understood better by referring to description of *Kala* in *Saptama Vega* of the Snake bite mentioned in *Sushruta Kalpasthana*

Purishdhara Sa Eva Asthidhara Kala is form the *Kleda* Present Between *Dhatus* i.e *Kapha* and *Purish*

Gastroenterologist may come across osteoporosis or osteopenia in patient with persistent gastrointestinal symptoms diseases

Conclusion -

After review of *Purishdhara kala Sa Eva Asthidhara Kala* it can be concluded that we assess association between Osteoporosis and Gastrointestinal tract symptoms with reference to *Purishdhara Kala* as *Asthidhara Kala* concept. This will help in the right interpretation of the various general learning's & also usage of Ayurvedic treatments (both *Shaman & Shodhan Karma*).

Hence *Acharya Charak* explained this correlation in *Sutrasthan Vividhashtitapitiy Adhyay*. The remedial measure in the disorders of *Asthi* consists of the multiple evacuative measures like medicated enema, intake of bitter-medicated milk and ghee. Gastrointestinal disorders can lead to significant impact on bone health and are frequent causes of osteoporosis and related fractures.

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