

## Journal of Ayurveda and Integrated Medical Sciences

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An International Journal for Researches in Ayurveda and Allied Sciences



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## Journal of

## Ayurveda and Integrated Medical Sciences

**REVIEW ARTICLE** 

July 2022

### An analytical review on Kloma

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#### ABSTRACT

The Kloma which is one of the root of Udakavaha Srotas is additionally an indefinite organ. A difference of opinion is found in Ayurvedic content with respect to the Kloma. While studying description related Kloma particularly through Sushruta Sharira Sthana it was seen that till date there is no conclusive sentiment about Kloma. The Viddha Lakshana (traumatic effects) of the Udakavaha Srotas is Pipasa (thirst) and Marana (death). So, to explain the anatomical area of Kloma and specify Kloma with the body organ was the prime plan to start this article. By the help of the patho-physiology of pancreas we correlate the organ Kloma with pancreas.

Key words: Udakavaha Srotas, Kloma, Pancreas, Viddha Lakshana

#### **INTRODUCTION**

Description of Kloma in various Ayurvedic Samhita's is different as it is said that Kloma is the Moola of Udakavaha Srotas. A difference of opinion is found in Ayurvedic texts regarding the Kloma. This article is a small step of direction in order to shine some light on the patho-physiological analysis of Kloma and pancreas.

#### **MATERIALS AND METHODS**

Major Samhitas of Ayurveda (Charaka Samhita, Sushruta Samhita, Astanga Hridaya) with their commentries. Basic modern physiology books, articles from journals and relevant internet sites were availed.

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Submission Date: 13/05/2022 Accepted Date: 22/06/2022

# Access this article online **Quick Response Code**

Website: www.jaims.in

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#### **OBSERVATION**

The identification of Kloma is uncertain and no unanimous opinion has emerged.

- According to Sushruta Samhita Sharira Sthana 4/31: by considering the anatomical situation of hridaya, and to the right are situated Yakrit and Kloma.
- Sushruta while describing Udakavaha Srotas in Su.Sha 9/12 he named Talu (palate) and Kloma as the moola of this Srotas and injury to these gives rise to severe thirst and death.
- In Su.Ni 9/22 one of the symptoms of Kloma Vidradhi is profound thirst making the patient crave for more water.

Previous day scholars have Identified *Kloma* variously:

- Trachea by B.G Ghanekar in Sushruta Samhita Sharira Sthana
- Trachea by Gananath Sen in Pratakahya Shariram (volume -2)
- Gall bladder by D.G thatthe in Ayurvediya Rachana
- Pancreas by Ranjitroy Desai in Ayurvediya Kriya Sharira

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#### **DISCUSSION**

By giving more emphasis to the function of *Kloma* as the site of production of thirst, it is an established fact now that neither the lungs, trachea, nor the gall bladder are concerned with production of thirst and maintenance of water balance in the body. Thirst is one of the important symptom of dehydration of the body. Dehydration is a state of pure deprivation of water leading to sodium retention and hence a state of hypernatremia (there is only loss of water without loss of sodium). Dehydration is a problem in diabetes mellitus.

#### **Mechanism of dehydration**

When a person is dehydrated



Extra cellular fluid volume is decreased



Concentration of sodium and other osmolar elements rise



Stimulation of thirst center (drinking threshold)



Person drink water and extra cellular fluid volume comes to normal, i.e., satiety (tripping mechanism)

Pancreas which is present in the abdomen, situated behind the stomach, on the left side is indirectly related to production of thirst and maintenance of water balance. Injury to the beta cells of the pancreas or diseases that impair insulin production can lead to type 1 diabetes. Insulin is released in to the blood by beta cells, found in the islets of Langerhans in the pancreas, in response to rising levels of blood glucose, typically after eating. Insulin is used about two-third of the body's cells to absorb glucose from the blood for use as fuel, for conversion to other needed molecules, or for storage. Insulin is also the principal control signal for conversion of glucose to glycogen for internal storage in liver and muscles cells. Lowered glucose levels results both in the reduced release of insulin from the beta cells. An insulin deficiency culminates in

diabetic ketoacidosis (DKA), accumulation of ketones and lactic acid in the blood and loss of electrolytes and water in the urine result in profound dehydration, hypovolemia, metabolic acidosis and shock.

Without insulin, diabetic ketoacidosis often develops which may result in comma or death. The *Viddha Lakshana* of *Udakavaha Srotas* is *Pipasa* and *Sadya Marana*. As these symptoms are also found in diabetic ketoacidosis, it will be more appropriate to identify *Kloma* as pancreas.

- We don't have any evidences for gall bladder to taking part in water regulation or balance. it is also not prone for more injuries, even if injured may not cause immediate death. As the Viddha Lakshana (traumatic effect) of Udakavaha Srotas (Talu, Kloma) is Pipasa, and Sadya Marana. Hence, it is concluded that it's not appropriate to consider Kloma as gallbladder.
- In the context of Su.Sha 5/31, Maharshi Sushruta described that Hridaya Kloma Sambandhit Nadi's are eighteen. Also, tracheal injuries are very rare. So, there is no evidential proof to consider Kloma as trachea.

#### **CONCLUSION**

symptoms of udakavaha *Srotas* viddha lakshana(pipasa and marana) resembles with the patho-physiology of pancreas. Thus, *Kloma* can be compared with pancreas.

#### **REFERENCES**

- Ambika Datta Shastri, Ayurveda Tatwa Sandipika, commentary of Sushruta Samhita part-1, Sharira Sthana, Chaukhamba Sanskrit Sansthana, Varanasi. chapter 9, page 96,97
- Ghanekar Bhaskar Govind. Ayurveda Rahashya Dipika Commentry on Sushruta Samhita Sharira Sthana: Meharchand Laxman Das Publication. Reprint December 2013, chapter 9, page -240-241
- Ambika Datta Shastri, Ayurveda Tatwa Sandipika, Commentry on Sushruta Samhita part-1, Sharira Sthana, Chaukhamba Sanskrit Sansthana, Varanasi, chapter 9 page 61,62

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- 4. Gananath Sen, Pratakahya Shariram, Reprinted Edition, Varanasi, Chaukhamba Sanskrit Publication, 2007, page -68.
- 5. Vd. Ranjit Rai desai, Ayurvediya Kriya Sharira, 1<sup>st</sup> Edition, Nagpur, Shri Baidyanath Ayurveda Bhavan:1999
- Chaurasia B.D, Garg Krishna, Mittal P.S, Chandraputla Mrudula, Human Anatomy, vol 1, reprint 6<sup>th</sup> edition, New Delhi,2014
- 7. Piyush Verma, Analysis of *Udakavaha Sroto Viddha Lakshana* with special reference to *Kloma* and acute

pancreatitis due to blunt abdominal injury. International Ayurveda Medical Journal, July 2018.

**How to cite this article:** Swapna Rani Meher, Sushil Dwivedi. An analytical review on Kloma. J Ayurveda Integr Med Sci 2022;6:186-188.

**Source of Support:** Nil, **Conflict of Interest:** None declared.

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