ABSTRACT
Fatty liver is also known as fatty liver disease (FLD) refers to accumulation of fat cells in the liver. The prevalence of fatty liver disease in the general population ranges from 10%-24%. As the fatty liver disease progresses liver inflammation can lead to cirrhosis of liver and liver failure. The focus of this study is to understand the Nidana and Samprapthi of Yakrithodara developed due to vitiation of Kapha caused by the continuous intake of Vidahi and Abhishyandhi Aahara, where we can see both Kapha and Pitta lakshanas (Kaphapittalingairupadhrukah) leading to Bhutaagni mandhya thereby causing Yakrit vriddi, Balaksheena, Panduroga etc., Here an effort has been made to understand the Nidana and Samprapthi of Yakrithodara w.s.r to Fatty liver.
Keywords: Fatty liver, Yakrithodara, Nidana, Samprapthi, Bhutaagnimandhya

INTRODUCTION
Liver is an important organ which is exposed to serious damage because of the indiscriminate use of systemic drugs, addiction to alcohol, undernutrition e.t.c. It is the most vital organ that functions as a centre of metabolism of nutrients such as carbohydrates, proteins and lipids and excretion of waste metabolites. Additionally, it is also handling the metabolism and excretion of drugs and other xenobiotics from the body thereby providing protection against foreign substances by detoxifying and eliminating them. Thus liver is not expected only to perform a wide range of physiological functions, but it has also to protect itself against these. Inspite of tremendous scientific advancement in the field of hepatology in recent years, more problems have been added rather than solved. Hence safe and preventive measures are needed and this can be done through proper understanding of the etiology and pathogenesis of liver disorders/yakrit vikaaras.

YAKRUT
The word yakrut is derived from ‘yaha’ i.e. one and ‘krut’ which literally means ‘does’. Thus liver is one which performs important functions of the body.
In Ayurvedic literature,
• Yakrit is considered as an important anga right from the vedic period.
• It is situated right and below to the hridaya and it is the sthana of Pittado-sha, Raktadhata and Bhutaagni.
It is the moola of Raktavaha Srotas.

Yakrithodara in Samhithas

In Charaka Samhita a reference is available regarding the enlargement of Yaktra (liver). Acharya Charaka in the 19th chapter of SutraSthana and 13th chapter of Cikitsa Sthana has enumerated 8 types of Udara Roga & while explaining the nidana, lakshana of Plihodara it has been mentioned that the nidana, laxana, samprapthi and chikitsa of yakrithodara are similar to that of Plihodara. Acharya Susruta and Bhavaprakasa have also included this disease indirectly in eight types of Udara Roga.

NIDANA OF YAKRITHODARA

1. Vidahi and
2. Abhishyandhi ahara

Vidahi Ahara:
The food substances which causes internal burning sensation like madhya, kulatta, spices etc

Abhishyandhi Ahara:
The food which causes obstruction to the srotas by secretion & which causes Kapha prakopa like dadhi, masha etc is said to be Abhishyandhi.

FATTY LIVER

Fatty liver, also known as fatty liver disease (FLD), is a condition of the liver wherein large vacuoles of triglyceride fat accumulate in liver cells via the process of steatosis (i.e., abnormal retention of lipids within a cell). The prevalence of fatty liver disease in the general population ranges from 10%-24%. Obese patients (60-90%) and up to 50% of type 2 diabetics have fatty liver. By considering the contribution of alcohol, fatty liver may be termed:

1. Alcoholic fatty liver disease (ALD/FALD) or Alcoholic steatosis
2. Non-alcoholic fatty liver disease (NAFLD) and the more severe forms as alcoholic steatohepatitis (part of alcoholic liver disease) and Non-alcoholic steatohepatitis (NASH).

ETIOLOGY:

1. Alcoholic Fatty liver disease-it depends on consumption and probability of developing alcoholism. And, it’s going to conjointly have an effect on levels of liver enzymes concerned with metabolism of alcohol. Other factors which influence include Hepatitis, obesity & diet.
2. Non-Alcoholic fatty liver disease - The causes for non-alcoholic disease are not defined, however some risk factors in some cases & in some no association of risk factors. However, NAFLD tends to run in families. The known risk factors are:
   - Overweight,
   - Broad frame,
   - Insulin resistance syndrome
   - High sterol or triglyceride

The nidanas which are explained in our classics for YAKRITHODARA and the etiological factors of the FATTY LIVER both simulate and responsible for aggravating Kapha and Pitta dosha producing lakshanas of Kapha and Pitta.

SAMPRAPTHI OF YAKRITHODARA

After the intake of the substances which increases kapha and pitta dosha like vidahi and abhishyandhi aahara the bhutaagni gets mandya since the liver is the main seat of Bhutaagni impaired fattyacid metabolism takes place in the liver. Kapha gets accumulated in the pitta sthana accumulation of fat occurs due to avarana causing Yakrithvriddi, Agnimandhya, Balaksheena etc symptoms thereby producing the disease Yakrithodara.
PATHOGENESIS OF YAKRITHODARA:

Nidana sevana  (Vidahi and abhishyangdi aahaara )

Kapha & Pitta gets dushtita

Bhutaagnimandhya (Impaired fatty acid metabolism)

Kapha Avarana in Pitta sthana (liver)

Accumulation due to avarana (Fat or triglycerides)

Yakritvridhhi (enlargement of the liver)

Agnimandy, Balaksheena, Panduroga

YAKRITHODARA

Need to Understand the Nidana and Samprapthi

- Helps in vyadhvinischaya
- Nidana parivarjana
- Samprapthi vighatana
- Reducing upadravas
- Knowing the Sadhya Asadhyata

CONCLUSION

It can be understood that the Nidana and Samprapthi of Yakrithodara which is developed due to the vitiation of kapha and pitta is similar to the etiopathogenesis of fatty liver. Correcting the bhutaagni can help in samprapthi vighatana of the disease

- The study has to be further explored through etiopathological study.
- Helps in better management of the disease.

REFERENCES

2. Sushruta. Sushruta Samhita with commentaries Nibandha sangraha of Sri Dalhanacharya and Nyayachandrika vyakhya panjika of Sri Gayadas


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