

Review Article

Indication of Radio anatomical approach for understanding Moolsthan

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ABSTRACT:

Ayurveda is life science. The researchers of Ayurveda could rule out the presence of srotas spreading throughout the human body. Srotas is the channel that transports only dhatu under metabolic transformation. The srotas have their own moolsthan or root. Some authors views that srotas can be interpreted as micro vascular carrier, which specialized for exchange of the material. Moolsthan of srotas means anatomical seat of respective srotas, main seat of pathological changes, having diagnostic value or it's be the focus of treatment. Radiological techniques helps the diagnosis of moolsthan of srotas.

KEY WORDS: Moolsthan, Raktavaha srotas, Rakta, Radiological techniques

INTRODUCTION:

Ayurveda has very vividly describe the anatomy of the human body, but in contrast to the modern sophisticated technology in ancient time. Ayurveda has given vivid description about the anatomy (rachana) in terms of kala, koshta, srotas, dhamani, dosha, dhatu, mala, etc. The physiology and pathology concept of human body cannot be clear without the specific knowledge of moolsthan of srotas. It will be helpful for the diagnosis of disease and give guidance for proper treatment to cure such a disease. Ayurvedacharya like Charaka, Sushruta, Vagbhat, etc. have given some criteria to diagnosis a particular disease on the basis of doshas, dhatu, malas, srotas, etc. channel or pores which carry nutrients and give the supply to dhatus of the body and also carry vata, pitta, kapha.

According to Vagbhat in ashatanghridaya sharirsthana mentioned two types of srotas that is Abhayantar srotas and bhaya srotas. According to Charaka, there are 13 types of srotas and also according to Sushruta there are 12 types of yogavahi srotas. The moolsthan of raktavahasrotas are yakrit and pleeha according to Charaka and Vagbhat. According to Sushruta the Moolsthan of Raktvahasrotas is yakrit, pleeha and raktavaha dhamanis.

The term mool is used in different meaning in ancient Indian literature. Acharaya Charaka has used this term in meaning of Karana, or Adhara means reason or base. In Sushruta Samhita and Ashtang hridaya, mool word has been used as tracer director or prob. In broad term moolsthan means utpattisthana (seat of origin of dhatu and mala), Sangrahassthana (seat of storage), Naidaniksthana (diagnostic importance), chikitsatmaksthana means important in treatment.

Aims and Objectives:

1. To study the Ayurvedic aspect of Moolsthan of Raktavahasrotas.
2. To understand the concept of stroto-moolsthan with special reference to Raktavahasrotas by using advanced radiological technique.

MATERIALS & METHODS:

1. Detailed conceptual study of moolsthan.
2. Detailed study of Advanced radiological technique e.g. USG, MRI, CT Scan, Radioisotope Scanning.

Observations and Discussion:

मुलात् खादन्तरं देहे प्रसृतं त्वभिवाहि यत् ऽ

स्त्रोतसादिनी विज्ञेयं सिरा धमनी वर्जितम् ऽऽ सु. शा. १२५

The ducts emanating from the cavity of hridaya other than siras, dhamanis are called srotas.

Moolsthan means uttapatisthan or prabhavsthan. Srotas means stravanatstrotansi, various channels into the body. When the srotas gets disturb due to doshas forms strotodushti lakshana and due to injury to srotas forms strotoviddha lakshan.

शौणितवहानां स्रोतसां यकृन्मूलं प्लीहा च । च.वि. ५८
मूलमिति प्रभवस्थानम् ॥ च.वि. ५८ चक्रपाणि टीका

The Raktavahastroto Moolsthan is yakrit (Liver) and pleeha (spleen). When these organs gets disturbed by dosha and mala they forms strotodushti lakshan. With the help of this we understand the vyadhi of a moolsthan.

Raktavaha srotodushti hetu:

विदाही अन्यन्नपानानि स्निग्धोष्णानि द्रवाणि च ।
रक्तवाहीनी दुष्यन्ति भजतां चातपानलौ ॥ च.वि. ५१४

Raktavahasrotas get vitiated due to intake of food drinks which irritant, unctuous, hot and liquid and exposure to sun and fire.

Srotodushti Lakshan of raktvah srotas:

वक्ष्यन्ते रक्तदोषजा कुष्ठ विसर्प पिडका रक्तपित्तमसृग्दरः ।
गुदमेद्वास्यपाकच्च प्लीहा गुल्मोऽथ विद्रधि ॥
निलिका कामला व्यंग पिप्लवस्तिलकालकाः ।
ददुर्चर्मदलं श्वित्रं पामा कोटास्त्रमण्डलम् रक्तप्रदोषाज्जायन्ते ॥
च.सू. २४११^१ १२

Following diseases are caused by the vitiation of rakta, kushta (obstinate skin diseases including leprosy) visarpa (spreading diseases of the skin including erysipelas), pidaka, rakta pitta (disease characterized by bleeding from part of body), Asrugdar (menorrhagia), Gud pak (inflammation of rectum), Meadhrapak (inflammation of phallus), Mukhapak (inflammation of mouth), Pleeha (splenic disorder), Gulma (abdominal tumour), Vidradhi (abscesses), Nilika (blue moles), Kamala (jaundice), Vyang (freckles), Piplu (portwine mark), Tilkalaka (black mole), Dadru (ring worm), Charmdala (dermatitis), Shivatra (leukoderma), Pama (papules), Kotha (urticarial) and asramandala (red circular patches). These diseases comes under vyavaharsharir of yakrut, pleeha and rakta vahi dhamani.

Vaidya should know the vyavahar sharir of yakrut, pleeha then only he can treat the raktapradoshaj vikarra. The drugs which are used to treat raktavaha srotovikar acts on yakrut, pleeha. Acharyas described raktapradoshaj vyadhi and in addition they also

mentioned pleehadaludar, yakrutdaludar separately under the heading of UDAR

Strotoviddha Lakshan of Raktavaha srotas:

तत्र विद्धस्य श्यावांगता ज्वरो दाहः पांडुता ।
शोणितागमनम् रक्तनेत्रता च ॥ सु.शा. ११६

SyaavaaMgata – black dis-colouration; Shonitagamanama – haemorrhage; panduta – pallor

Raktavahastrotodushti Chikitsa:

कुर्याच्छोणित रोगेषु रक्तपित्तहरी क्रियाम् ।
विक्रेकमुपवासं च स्त्रावणं शोणितस्य च ॥ च.सू. २४२४

Therapies like virechan (Purgation), upvas (fasting) and Raktavistravan (blood-letting) indicated for the treatment of raktapitta are also useful for curing diseases due to the vitiation of blood

Radiological Techniques

Radio anatomy (X-Ray anatomy) is anatomy discipline which involves the study of anatomy by using various radio-graphical techniques.

The Radiological techniques can be used for diagnose the disease of moolsthan and treatment can be done. There are various advance techniques e.g. USG (Ultrasound), MRI (Magnetic Resonance Imaging), CT scan (Computed Tomography scan), Radioisotope scanning. The radio anatomical approach is necessary for understanding of moolsthan of Raktavahasrotas, hence radio anatomy study is helpful.

USG of Liver: Abdominal ultrasound, which uses sound waves to produce pictures to evaluate the size and shape of the liver, as well as blood flow through the liver. Ultrasound electrography is special ultrasound technique to test for liver fibrosis.

MRI of liver: MRI of the belly can help to find problems such as tumours and infections. It can also find bleeding and a block tube or stones in the tube that carries bile from the liver to the gallbladder.

CT Scan of Liver: CT scan of the liver and biliary track may be performed to assess the liver, gallbladder and their related structures for tumours and other lesions, injuries, bleeding, infections, abscesses, unexplained abdominal pain obstructions or other conditions.

Liver radioisotopes scanning: A liver scan may be done to check for diseases such as liver cancer, hepatitis or cirrhosis. Lesions such as tumours, abscesses or cysts of the liver or spleen may be seen on the liver scan.

USG of Spleen: Ultrasound may be used to detect many digestive problems including cysts or abnormal growth in the spleen, abnormal enlargement of the spleen.

CT Scan of Spleen: Computerized Tomography scan helps to determine the size of spleen and whether its crowding other organs.

MRI of Spleen: MRI of spleen is helpful to trace blood

flow through spleen. A liver spleen scan may be used to detect cancer in the liver or spleen.

Radioisotopes scanning of spleen: The use of radio isotope for spleen scanning has become a valuable procedure for detecting functional spleen size.

Hence due to all uses of these techniques there is an indication of radio anatomical approach for understanding moolsthan.

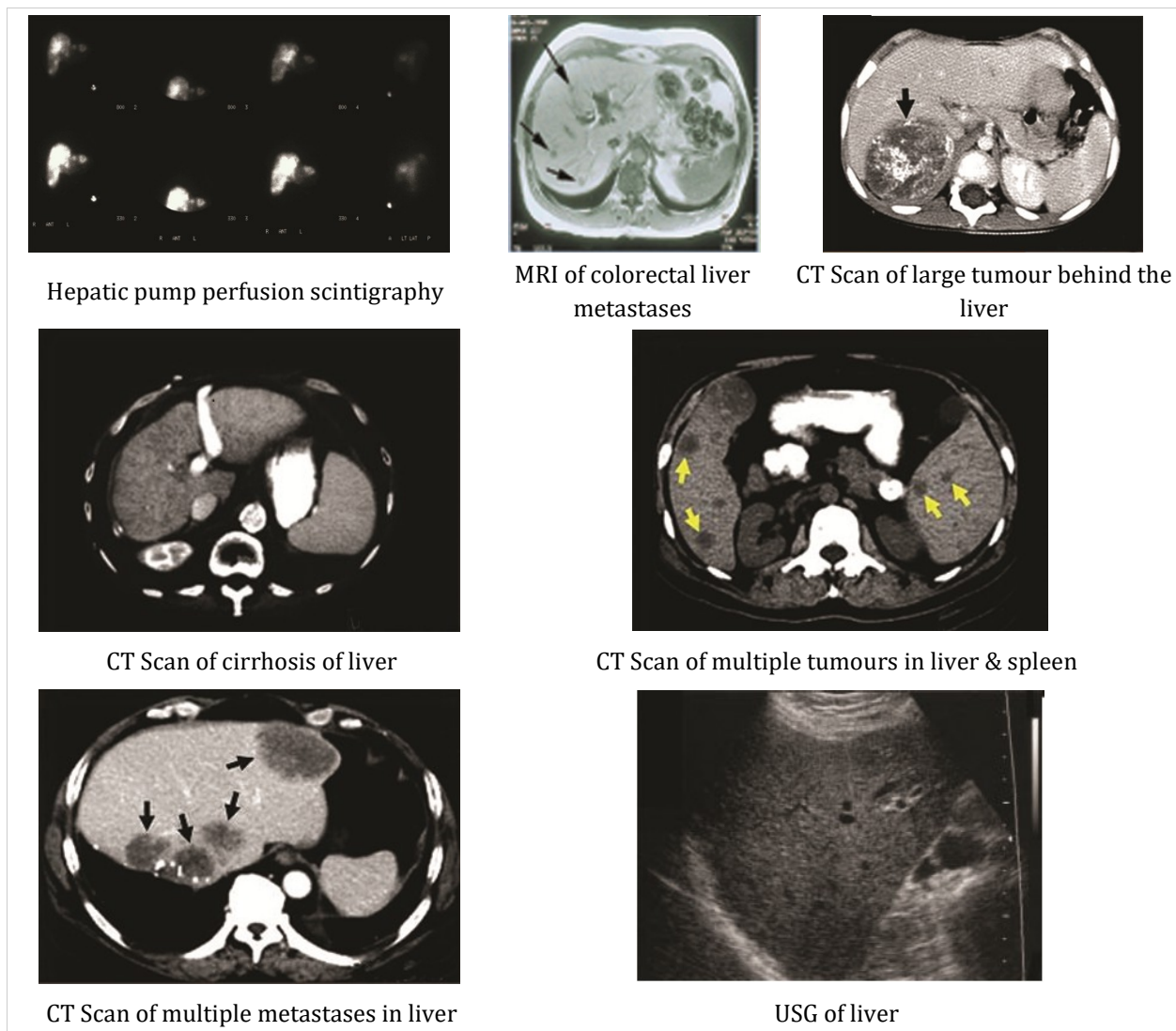


Figure No. 1: Radio-graphical Images

Application of Radiological techniques like USG, CT Scan, MRI, of related organ describes the microanatomy and normal functioning of raktvahasrotas moolsthanas means liver and spleen. Radioisotopes scanning means radionuclides imaging of related organ liver and spleen, also indicates raktvahasrotodushti lakashana.

CONCLUSION:

To enlighten the concept of srotomoolsthan, radiological techniques to be preferred

Selection of specific radiological technique (e.g. radionuclide isotope) can further explain specific moolsthan of different srotos

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