CONCEPTUAL STUDY OF GRATHITA RAKTAPITTA W.S.R TO COR PULMONALE AND ITS MANAGEMENT BY KAMALNAALKSHAR

Kadam Krishna1* and Jadhav Viraj2

1Ph.D. Scholar, Asst.Professor, Department of Rog Nidan Vikriti Vigyan, Government Ayurved College, Nanded, Maharashtra, India.
2Associate Professor, Department of Rachna Sharira, Rani Dullaiya Smriti Ayurved P.G. College, Bhopal, Madhya Pradesh, India.

*Corresponding Author: Dr. Kadam Krishna Ph.D. Scholar, Asst.Professor, Department of Rog Nidan Vikriti Vigyan, Government Ayurved College, Nanded, Maharashtra, India.

ABSTRACT

Ayurveda offers the tools of leaving healthy life and solutions to recover from unhealthy status. For this, our Acharyas quoted a lot of enchanting secrets, thousands years ago in Ayurveda Shastra. Among these, use of Kamalnaalkshar in state of Grathita Rakta i.e in condition of thrombosis is one of them. Today is the era to explore the practical aspects on the basis of the therapeutic principals, which were written earlier, with the help of modern science. Author tried to give conceptual idea through this article for comparison of state of Grathita condition as mentioned in Charaka Samhita, by Acharya Charaka with that of Cor Pulmonale.

KEYWORDS: Cor Pulmonale, Pulmonary Embolism, Deep vein thrombosis, Kamalnaalkshar.

INTRODUCTION

Health is real wealth of life ‘This wealth is being lost, since now a days we are living in a world of stress, Strain and Struggle. The unhealthy life style developing as a new culture among the people. Fast running life, changed dietary habits, inappropriate sleep, burning competition, increased workload are the main causes for various physical, mental and psychosomatic disorders, this fact reduces our potentials. Ultimately these things promoting the human for use of allopathic medicine, causing various side effects, providing greatest hazards for them in coming days. Science is the knowledge, arranged in an orderly manner, especially knowledge obtained by observations and testing of facts. Ayurveda is also such an eternal science, where our ancient sages through their asservative knowledge are written the facts. Those fundamental facts are still applicable because of their scientific research not only to prove its truth but also to understand the fundamentals in better manners. Ayurvedic classics always emphasized the need of advancement, in the science to keep pace with need of treatment. Understanding of Ancient Ayurvedic concepts through investigative measures and their proof for curative purpose through their applications on man. Now it became need of today. Ayurveda the ‘science of life’ is full of uncountable secrets, out of those one is ‘Kamalnaalkshar’ (Kshara prepared by Kamalnaal), mentioned in Ch. Chi.-2 that is Raktpittachikitsadhya.

Which means that, this drug may be an indication for treating the common cause of cor pulmonale, leading to Ischemic heart disease (IHD). In Ayurvedic literature, the concept of Grathit raktapitta given in Raktapittachikitsa by Acharya Charaka. But the pathogenesis of Grathita (stagnated) state of Rakta is not mentioned. So it is important to describe Grathit raktapitta in detail with help of modern science approach. The hypothesis regarding to use of Kamalnaalkshar in management of Cor-pulmonale is also one of the subject, requiring more concentration. They requires a sequential study of subject for making a hypothesis, useful in deciding the curative treatment of cor-pulmonale (Pulmonary embolism) and Grathita Raktapitta. With the help of modern and Ayurvedic hypothesis, it is possible to correlate Grathit Raktpitta with Cor pulmonale (or pulmonary embolism).

AIMS AND OBJECTIVES

1. To find out the solution of some medical emergencies, like pulmonary embolism in Ayurvedic perspectives.
2. To rule out the mechanism of action of Kamalnaalkshar and its use in Grathita Raktpitta and Pulmonary embolism.
3. Correlation of pathogenesis of Grathita Raktpitta with Cor-pulmonale regarding with Ayurvedic and modern concepts.

For these purposes author tried to give.
1. Detailed description of pathogenesis of Pulmonary embolism and Grathita Raktapitta.
2. Properties of Kamalnaalkshar with its mechanism of action on above diseased states.
3. Possible correlation among these states with respect to modern and Ayurvedic description in this paper.

Human being possess inbuilt system by which the blood remains in fluid state normally and guards against the hazards of thrombosis and haemorrhage. However injury to the blood vessel initiates thrombostatic repair mechanism or thrombogenesis.

Primary events, predisposing to thrombus formation are given by – Virchow called “Virchows triad” –
1. Endothelial injury
2. Alteration in flow of blood.
3. Hyper coagulability of blood.

Cor Pulmonale
Cor-meaning heart; pulmonale = lung. It is a pulmonary Heart disease of right side of the heart resulting from disorder of the lungs.

Emboli is the process of partial or complete obstruction of some part of cardio vascular system by any mass carried in the circulation; the transported intervasucular mass, detached from its site of origin is called as an embolus. Emboli may be cardiac, arterial, venous or lymphatic origin. Depending upon the rapidity of development, Cor pulmonary may be acute on chronic.

Accute Cor pulmonary occurs following massive pulmonary embolism resulting in sudden dilation of the pulmonary trunk, canus and left ventricle.

Pulmonary embolism
It is the most common and fatal form of venous thromboembolism in which there is occlusion of pulmonary arterial tree by thromboemboli. The causes responsible for this diseased stage are mainly originating from sources since.

With this two origin, Pulmonary embolism may be minor, occurring at the site of periphery or it may major leading to main artery blockage.

Potential outcomes of Venous Thrombosis

![Potential outcomes of venous thrombosis](image)
DEEP VENOUS THROMBOSIS
Thrombus, present in larger veins of lower legs i.e. popliteal, Femoral, Iliac veins
↓
Thromboemboli
↓
Venous drainage
↓
Larger Veins
DRAINING AS/IN

Multiple form of emboli
↓
Impacted in
Right Side of Heart
Paradoxical embolism
↓
Arterial or Ventricular septal defect
↓
Systemic circulation

Number of vessels
↓
Obstruction of Small sized pulmonary arteries
↓
Pulmonary infarction
↓
If embolus is large

at the bifurcation of main pulmonary artery
↓
Death
↓
Right Ventricle
Acute cor pulmonale
↓
Outflow tract

Chest pain
↓
Dyspnoea
Haemoptysis
↓
Fibrinous pleuritis
↓
Reduced functioning pulmonary parenchyma.
due to
↓
due to
Flow chart showing events occurring in pathogenesis of Cor pulmonale

As like Cor pulmonary correlating events in pathogenesis of grathit raktapitta are

KAMAL δδεύ &

Latin Name: Nelumbo nucifera
family: Nymphaeaceae

Properties of Kamal are –
deya 'khry o.;Za e/kqi% dQfiÚkftr~ A
(Bh. Pra.)

Kamal has Madhur, Tikta, Kashay Ras with sheet Virya and Madhur Vipak.
Kamalnaal is termed as Mrinaal.
Properties of this Kamalnaal are –
e'.kkya 'khrya o";ka fiÚknkg kL=ftn~ xq: A
nqtZj Loknqikd"p LrU;kfuy dQizne~AA
(Bh.Pra.)
Kshara

Importance of application of Kshar in words of Acharya Sushruta is –
'kL=kuq’kk:=%H;% {kkj}% iz/kkure%A ¼4q-lw- 11½

Specification of Kshara are
{kk,kkr~ {k.kuk}k {kkj}%A ¼4q-lw- 11½

Properties of Kshara are quoted as
f=nsk”k2u% ¼kDyRokr-- lkSE;% A
rL: lkSE:L:kfi irks ngrupunkj,kkfn’skDrfj:v}k
vkXUk;kS’kk/kkq,Hkwf;”BrOkr--} dVqdl
m”.khr[.kks ikpaks foy;u A ¼4q-lw- 11½

Out of two types of kshar (Pratisarniya and Paniya), Paniya kshar is used for internal application – The kshar should be.

u vfrfr{[k u vfr’}q u vfr’kkDy’y[.kfiPn}y’}o;f;U/n fko ‘kh?k2z--------A ¼4q-lw-11½

{kkjLrk ikpuk% losZ irDrIUKdkjk% lkj% A
¼4q-lw- 46/2

Considering properties of Kamalnaala and Kshar, the compound formed i.e. ‘Kamalalkshar’ can be used in grahithe state of Rakta i.e. for dissolving the emboli in pulmonary embolism.

DISCUSSION

According to Ayurvedic view, thrombus is the state of Rakta with the contamination of Kapha. From this state of formed thrombus, when some part releases out, propagates through the circulatory mechanism by Vata. In body where there is site of srotovaigannya (khavaigannya), it accumulates there and whenever there is occurrence of Doshdushya Samarchna, embolism develops.

Aetiological factors like abhojana, atibhojan, vishmashan, vegvidharana, daurbalya etc. leads to Jathraghimandya. Due to Mandata of Jathragriya problems get created in pachan of ahar which leads in formation of Amayukta Rasdhatu. Due to kshay of Rasagni, next forming raktdhathu is also amayukt, that it is not formed in its normal form, which increases heaviness and viscosity of blood. (i.e. increases picchiltha and guruta of blood) thus gradually disturbances get arising altogether the circulatory fluid. There occurs increased tendancy of coagulation.

With vitiation of vata, emboli circulates through the blood vessels and when there is localization of this emboli, pathogenesis occur. If his localization occurs in heart or pulmonary veins, then there is development of Cor – pulmonale or pulmonary embolism. And when it localizes in brain, there is development of Cerebro vascular accidents (CVA).

On the other hand due to improper formation of Rasdhatu, there is an increase in sam Kapha. When this Sam Kapha migrates to lungs through vitiation of Vata in

Urh- Pradesh or in thoracic region, it produces Dyspnoeoa and Haemoptysis due to increased pressure. For this leading symptoms, some particular aetiological factors also necessary i.e. administration of Raja, Dhma, Rukshta, Pandu, Arati, Kshata, Kshaya etc. When localization of Sam kapha is in joints, there are chance of Arthritis and when it localize in upper part, Sinusitis may develop.

Side by side if this Sam kapha causes obstruction of Rasvaha strotas, causing Srotosang. Due to which there is Raskshaya and patient develops Rasdhautukshayanja Daurablya. With the help of reference, quoted by Acharya Charaka in Raktpitha Chikitsadhyaya.

dQkuqU/kks :f/kjks lUks d.Bkxrs lkn~ xzfFksr iz;ksx % A
vDr; vDrR;k {kkjks nh;r.o jDrfiRrs AA ¼p-fp- 2½

Which explains, the curative purpose of Grahithe raktpitta with the Kshara of Kamalnaala.

Ksharas are contraindicated in Raktpitta, since they are of tikshna nature. (as told by Acharya Sushrut) Then it is noticeable that why the Kamalnaalkshara is used for dissolution of kapha at the site of Kantha ? For this, an explanation is given by Acharya Chakrpani, that.

jDrfiRgg{RoizHkokr-- mRiyukyfn{kjkks HkoR;so jDrfiRgg% A
;u rh{.kkfu nzO;kf.k ifjR;T;ksRiyuknhU;so {kkjFkZekkg A
uq mRiyhukefXunkgkPNkrRoe;kR;so A ¼pDikf.k½

That means, due to Raktpittahar prabhav of Upalnaalakshara it acts as Raktpittahar agent. Though tikshna dravya are contraindicated as like Kshar in Raktpitta, but Kamalnaala is an exceptional drug where it play an important role in this subjects i.e.

1. Kamalnaala is sheetal in nature
2. Kamalnaala has Raktpittahar prabhav.

The Kshara prepared from Kamaalnaala, overcomes the nature and properties of the basic drug ie of Kamalnaala. It reduces the majority of tikshna and thus act as an Ideal Thrombolytic agent, quoted by Vartik Kshirsamidatta that –

‘khra tgrfr Hkwf;’Ba nX/ka lifn lksrke~ A

It means sheeta property overcome the dagdha due to predominance of somtwa (Soumyatwa).
It means sheet with predominance of somatwa, overcomes the ‘dagdh.’ That is the thing present with Kamalnaalkshara by which it acts as an thrombolising agent.

CONCLUSION

By above discussion, now we can focus on some summarized points, that the paper includes –
1. Comparative correlation between Grathita Raktpitta and Cor pulmonale.
2. Also with Pulmonary embolism
3. Kamalnaala when prepared into Kshar, it becomes more effective with the view of curative purpose of
Grathit Raktapitta. That means it proves thrombolytic property on Grathita state of Rakta.

REFERENCES


5. Bhav Prakash Nighantu of Shri Bhav Mishra Commentary – By K.C. Chunekar and edited by Dr. G.S. Pandey, Chaukhamba Bharati Academy, Varanasi.


10. Pathologic basis of disease – by Dr. Kumar Robbinsons and Catran 7th w.b. sounders Co. Philadelphia.