AYURVEDIC ASPECT OF PLEURAL EFFUSION

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ABSTRACT

Pleural effusion is an abnormal and excess accumulation of fluids in the pleural space between the parietal and visceral pleura of the lungs. Breathlessness, chest pain and non-productive cough are the most common symptoms associated with pleural Effusion. Actually one disease mentioned in Ayurvedic classics suggest group of diseases of modern science of that particular system. Urahstoya clearly not mentioned in Brihatrayi but the disease having same pathology mentioned i.e. Jalodara – accumulation of fluid in Udarasthita Shleshmadhara Kala and the disease having same clinical manifestation i.e. Parshwashula has been mentioned in Ayurvedic classics. So here we have correlated Pleural Effusion with Urahstoya and Parshwashula. In this critical analysis we focused on the Nidana, Samprampti and the Ayurvedic management of pleural effusion.

KEYWORDS: Jalodara, Pleural cavity, Pleural Effusion, Shleshmadhara Kala, Urahstoya

INTRODUCTION

Pleural effusion is an abnormal and excess accumulation of fluids in the pleural space between the parietal and visceral pleura of the lungs. Breathlessness, chest pain and non-productive cough are the most common symptoms associated with pleural Effusion.1 In Ayurveda we can correlate this with Urastoya mentioned in Bhaishajya Ratnawali But there only chikitsa is mentioned In Ayurvedic classics disease nomenclature done on the basis of site of pathology like Udararoga, Jalodara like that mentioned Urahstoya. Urahstoya can be defined as accumulation of Drava Abdhatu by in Shleshmadhara kala (Urahdhara or Parshwadhar Kala) of Urahpradesh. (In pleural cavity) Urahstoya clearly not mentioned in Brihatrayi but the disease having same pathology mentioned i.e. Jalodara – accumulation of fluid in Udarasthita Shleshmadhara Kala and the disease having same clinical manifestation i.e. Parshwashula has been mentioned in Ayurvedic classics. So here we have correlated Pleural Effusion with Urahstoya and Parshwashula. In this critical analysis we focused on the Nidana, Samprampti and the Ayurvedic management of pleural effusion.
fluid in *Udarasthita Shlesmadhara Kala* and the disease having same clinical manifestation i.e. *Parshwashula* has been mentioned.[2] Actually one disease mentioned in *Ayurveda* classics suggest group of diseases of modern science of that particular system. So when mentioned *Parshwashula* can suggest Pleural effusion, Pericardial effusion, or other pathology creates pain at chest region. So here we have correlated Pleural Effusion with *Urahstoya* and *Parshwashula*.

**AYURVEDIC ASPECT**

*Urahshtoya* can be defined as accumulation of *Drava Abdhatu* by in *shlesmdhara kala* (*Uradhdhara or Parshwadhara Kala*) of *uralpradesh* (pleural cavity).

**Shlesmadhara Kala**

चतुथी श्लेष्मधरा सर्वसंधिघुं प्राणाभुता भवति |
स्नेहाभ्यक्ते यथा हयक्षे चक्रं साधु प्रवर्तते।
सन्ध्य: स साधु वर्तन्ते संशिष्टा श्लेष्मणा तथा |
......(सूःशा.४/१५)

**Sarvasandhishhu**

*Shlesmadhara kala* is situated at *Sandhi pradesh* i.e. in joint cavity containing *Shleshak Kapha* *(Sanslishta sleshma)* for easy movement. But *Acharyya Sushruta* mentioned that *Peshi, Snayu, Sira* having infinite number of *Sandhi* so the cavities in body that situated for movement fascility can be included into *Sandhi*.

So Pleural cavity is type of *Shleshadhara Kala* or *Parshwadhara Kala* which formed by adhesion of visceral and parietal pleura containing pleural fluid i.e. *Shleshaka Kapha* for frictionless movement of lungs. For example *Amavata* (Rhematoid Arthritis) is disease of *Sandhi* i.e. It affects joints as well as *Parshwadhara* (Pleural cavity) or *Hridaya dhara Kala* (Pericardium) so clinically we get Pleuritis, Pericardial effusion as extra-articular manifestation of Rhematoid Arthritis.[3]

**Parshwashula**

In Ayurveda *Parshwashula* is not mentioned as seperate disease but is type of *Shula* by *Acharya Sushruta* in the form of complication of *Gulma*.[4] According to modern science
pleural effusion (Parshwashula) is also found as complication of other disease. Acharya Charaka also mentioned it as symptom of Rajaykshma.\(^5\) (According to modern science Pleural Effusion is common manifestation of Pulmonary Tuberculosis. So here Parshwashula can be defined as pathogenesis of Parshwadharaka Kala.

**Etiology (Nidana)**

व्यायामयानादितमेैङ्गु्राच्छ प्रजागाचार्यत्तलतातिपातत् ||
कलायमुद्रागाटिकांमवदत्यर्थ स्वताध्यानाभिजिततात् ||
कषायातिक्तातिनिवर्णज्ञानविरुद्ध वल्लूरकशुष्ककायकात् ||
विदुषकुमुदानिनि वेगावरोध शर्कोपासादधारिकायात् ||
वायुप्रवृत्तो जनयेदविशेषेऽर्षपाश्वे........................|| (मा० न० २६/२-५)

Excess exercise, coitus, Cold water intake, Ruksha Adyashana, Abhighat (Trauma), Kashaya-Tikta, Virudhhana, Langhana, Vegavarodha, Shoka. Etc. Actually Parshwashula occur as complication of other diseases so etiology can be different according to that disease like.

**Rajasadhoomvatabhyam…(Ch chi 18/19)**

In Parshwashula mainly Pranvaha strotas involved so Dushita Ambarpiyusha inspiration mentioned in Shwasa nidana are also important causes of Pranvaha strotodushti i.e. Rajasa (Dust, Asbestos, Industrial carcinogens, diesel fume, uranium, nickel, radon), Dhuma (Smoking causes Ca in 90% people), Vataprakopa. these all are also contribute to Pleural Effusion (Parshwashula).

**Aupsargik**

In Rajayakshma it is sannikrisha nidana i.e suggests extension of infection from underlying lung leads to pleural effusion.

**Associated with others disease complications**

मुनुरुकुच्छे च भुत्रोगे श्वासे कासे अथ शोधके।

विदुष्टं औषधं यद्यत्तलद्रापि योजयेत् || (भै.४५/६)
Treatment of these diseases leads to relief in Urahstoya means as complication of above disease pleural effusion develops

2. *Hridroge*– Congestive heart failure, Constrictive pericarditis, Restrictive cardiomyopathy.
3. *Shwaskase*-Pulmonary infections. Or Cor-Pulmonale induced or connective tissue disorder extension to lung.
4. *Shotha*– Severe hypoproteinemia, Superior vena cava obstruction, Cirrhosis of liver………

**Pathogenesis (Samprapati)**

रुणवद्ध भारुतं श्रेष्भा कुक्षऺ ऩाश्र्वव्मर्न्स्थत्।
स संरुद्ध; करोत्याशु साध्भानं गुड़गुडायनम्।।

पाश्वेशूलः विजेयः कफानिलसमुद्रः॥ (सु०उ०त० ४२/११)

**Ruddadhimarutamsleshma**

All etiological factors of *Parshwashula* leads to *Vataprapoka which further result into pittaprapoka*. *Urah is Sthana of Kapha*. So vitiated *Vata-Pitta leads to Shleshaka-Kaphadushti* leads to excess production of pleural fluid in parshwadhara Kala.

**In this pathogenesis**

- *Vata*- Stimulate excess production of Shleshaka Kapha.
- *Pitta*- Usna guna leads to increase drava abdhatsu production due to inflammation of pleural cavity.
- *Kapha makes Srotovarodha and Dhatwagnimandya*

**In Rajayakshma**

स प्रकुपितो दशिंक शरीरमनुसर्पन् उदीर्य श्लेष्मपित्ते परिशोष्यति मांसशोणिते, प्रच्यावयति
श्लेष्मपित्ते संसृजिति पाश्वे॥ ....... (च०जि० ६ /४)

Vitiated *vata dosha* leads to *pitta-kapha* vitiation that leads to *mans shonita kshaya* i.e cavity formation after that *prakupita Pitta- Kapha* get accumulated in *Parshwadhara Kala* leads to Pleural Effusion.
Some Acharya considered jalodara pathogenesis for Urahstoya and called as Jatodaka parshwashula.
(Su chi 23/7-9)

*Acharya Kashyapa mentioned that*

कफो हि वायुना क्षिप्तो विष्टद्वधः पाश्चवयोहैदि।
खरीकृतश्च पित्तेन शल्यवद्याधिते नरम् ॥
(का० सं० कल्पस्थान पृष्ठ १८२-८३)

*Kaphohivayunaksipto-Vikshepana of Dosha, Dhatu, Mala* is one function of Vata. Vistabdhoparsyohridya- So due to vitiation of vatadosha – Kapha get accumulated in lateral aspect of heart i.e. In Pleural cavity.

*Kharikritash pitten*

These vitiated vata-kapha leads to Pittaprakopa and, tikhsha guna of pitta leads to shoshana of Kapha. That Kharibhuta Kapha act as Shalya & develops Parshwashula (Dry pleurisy).

According to modern science Dry pleurisy leads to Wet pleurisy.

**Symptoms (Roop)**

1. पार्श्वशूलं त्वनियतं संकोचायामलक्षणम् । (च० चि० ८/५६)
2. स संस्रद्धं करोत्याशु साध्मानं गुडङ्गायनम् ।
सूचीभिरेव निस्तोदं कृतद्वेर्षवासी तदाद नरः॥
नान्नं वाज़ति नो निद्रामपैत्यतिनिपिदतिः। (सू०उ०त० ५२/१६-२१९).

1. Continuous chest pain with restricted movement.
2. Sometimes there may be abdominal pain
3. Pricking or stabbing chest pain or pleural rub.
4. Difficulty in breathing.
5. Anorexia.
TREATMENT (CHIKITSA)

1. निदानपरिवर्तन

तृषिनियमं कार्ये न सैय शीतलोदकम्

हिमपवनो अभिष्यन्ति निखिलं यतनत्; सदा॥ (७७८/२)

- Cold water restriction.
- Cold air and Abhishyandi bhojana (Increases chances of secondary infection)
  
  Treatment of main disease gives relief –

मुत्रकृच्छे च हुद्रोगे श्वासे कासे अथ शोथके।

निदिष्टं औषधं यदृ यत्तत्त्तद्गापि योजयेत्॥......(७७८/६)

Medicines mentioned in Mutrakrichha, Hridroga, Shwasa, Kasa, Shotha gives ultimately relief in Urahstoya.

Chikitsa siddhant

कफह्रं औषधं यत्स्याद् यथा मुत्रमुल्तमम्।

तदेवदात्व उरस्तोयगदे दध्यात् भिष्ण्वः॥ (७७८/१)

First use Kaphaghna aushadha for accumulated shleshma nirhan

Use of Mutrapravartaka Aushadhi (Diuretics) is much beneficial.

पादवशिष्टमुष्णं श्रुतं वा क्षीरमल्पशः। पिबज्जातत्तुसं कुर्यात पिपासा उपशरं सदा॥ (७७८/३)

To check excessive thirst (Trisnaniyaman) in order to control water intake-¼ th boiled water (kwatha) should be given in little quanitity (in short interval), and in same manner Mandoshna dugdha should be given to the patient.

Varsabhu yoga[६] Punarnavamula swaras or kwatha with Yavakshaar 4 to 6 Ratti.

अपि उदराधिकरोक्तो रसो वि वारिषोषणः। पुनर्नवाष्टक क्रवाथ उरस्तोयगदे हितः॥ (७७८/५)

Udara roga adhikarokta

Varishoshana rasa, Punarnavashtaka kwatha, Virechaka drugs
Sanshamana chikitsa kalp\[^{[7]}\]
**(In case of small fluid accumulation)**
- Ras sindoor
- Manikya ras
- Laghumalini Basant Ras
- Shwaskuthar Ras
- Arogyavardhani vati
- Dwiruttar hingwadi churna etc.

**In Excess fluid accumulation**
- Panchsoot ras
- Neelanjan Bhasm
- Astamrit Bhasm
- Vrihcsringrabhra Ras
- Bharngyadi kwath
- Nirgundi tail (Bahya & Abhayanter prayog )
- Talisadi modak
- Punarnawastak kwath etc.

**Pleural Tapping**
एवं क्रियाभिषेक्य व्याधिनोपसाधित्येवत्क्रिदान्। तदा शस्त्रक्रियां कुर्याच्छत्रकर्मविशारदः।
मुनिनिद्योरन्तराले तथापवत्तिक्षेत्रोऽ। पर्कास्त्रनर्दश्रिदेशोरपि शस्त्र त्रिकूर्षकृम्।
रक्तस्तु युक्तप्तिहेष्टदेशं प्रवेशयावहितो भृश्म्। निमहंदेखिन् नोरें तेन व्याधिनिवर्तते। ॥
(७०२० उरस्त्तेय चि० प्र० ८५/६-९)

If pt not having relief by Shamana medicine then surgical tapping should be done. Tapping should be done with trikurchaka shastra (Three way canula) inserting in between rib. By this method appropriate amount of fluid should be removed. During this tapping we have to take care of liver and spleen from injury.

**Apathya**
शीताम्बु अध्वगमांत्या व्याधयां मैथुनं तथा। दिवास्वाप्पं क्रोधशोकौं जहयाददं गतामयः। ॥
Cold water, Excess walking, Exertion, Coitus. Diwaswapa, Krodha-shoka.

CONCLUSION
Ayurveda always states that if you don’t find the name of particular disease in text, in such situation correlate the features of applied physiology with doshas and strotasas which are involved and then only treat as per Ayurvedic principles of treatment. To treat pleural effusion appropriately, it is important to determine its etiology. Generally, the treatment of any disease depends upon the cause of that disease. But still there are many factors which can help us to stay healthy and disease free to some extent. These factors include healthy lifestyle, healthy diet follow pathya and apathy, So from this review it can be concluded that Ayurvedic system can also provide a relief to the patients if we do treatment according to the targeted dosha, strotasas and agni and by following pathya and apathy then patients can take benefits of Ayurvedic medicines for healthful longevity.

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