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PHARMACOLOGICAL ACTIONS OF SHWASA HARA DRAVYAS(ANTI ASTHMATIC/BRONCHIAL ANTI SPASMODICS DRUGS) - A LITERARY REVIEW

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ABSTRACT:

The word *Shwasa* refers to dyspnoea or difficulty in breathing. Also called as breathlessness. The triggering factors are pollen, dust, feathers, exercise, viruses, chemicals, smoke. As per *Ayurvedic* literature breathlessness appears in persons who indulge in foods which produce *Vidahi*(Burning sensation), Guru(Heavy), *Visthambhi*(Constipation), *Ruksha*(Dry), *Abhishyandi Bhojana*(Eating hard food which blocks the tissue pores, *Sheetapana*(Drinking cold water), starvation, *Dhooma*(Exposure to dust, smoke), walking long distance without taking rest, exercise, *Vegavarodha*(Suppression of Natural urges), *Apatarpana*(Malnutrition). The *Shwasa* is of five kinds viz; *Mahati*, *Urdhwa*, *Chinna*, *Tamaka*, *Kshudra*. The drugs which relieve breathlessness or asthma are termed as *Shwsahara dravyas*. Viz; *Shati*(*Hedychium spicatum* Buch-Ham), *Pushkaramula*(*Inula racemosa* Hook.f), *Amlavetas*(*Garcinia pedunculata* Roxb), *Ela*(*Elettaria cardamomum* Maton), *Hingu*(*Ferula narthex* Boiss), *Agaru*(*Aquilaria agallocha* Roxb), *Tulasi*(*Ocimum santum* Linn), *Bhumyamalaki*(*Phyllanthus rubaria* Linn), *Jeevanti* (*Leptadenia reticulata*), *Choraka*/ *Chanda* (*Angelica glauca* Edgew,). Here an attempt is made to highlight these drugs with their pharmacological actions, properties. Further scope of study is to evaluate their anti-viral activity which causes the breathlessness or asthma.

KEY WORDS-

Ayurveda, Shwasahara Dravyas, Sushruta Samhita, Charaka Samhita, Madhava Nidana, Pharmacological actions etc.

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INTRODUCTION-

Asthma or dyspnoea is a condition in which a person is unable to breath deeply. It can be acute or chronic. This condition happens because of inflamed, narrow of the airways of the lungs and production of extra mucus which makes difficult to breath. This breathing discomfort is because of some triggering factors^[1] Viz; pollen, dust, feathers, exercise, viruses, chemicals, smoke. As per Ayurvedic literature breathlessness appears in persons who indulge in foods which produce Vidahi (Burning sensation), Guru (Heavy), Visthambhi (Constipation), Ruksha (Dry), Abhishyandi Bhojana (Eating hard food which blocks the tissue pores, *Sheetapana* (Drinking cold water), starvation, Dhooma(Exposure to dust, smoke), walking long distance without taking exercise, Vegavarodha rest, (Suppression of Natural urges), Apatarpana (Malnutrition), Vidahi (Burning sensation), Guru (Heavy food), Dadhi (Curd), Raw milk, Kaphakara Ahara (Heavy food), Kshata (Injury), Tila Pista (Paste of Sesamum). The symptoms include wheezing, coughing, chest tightness, shortness of breath. The Shwasa is of five kinds^[2] Viz; Mahati, Urdhwa, Chinna, Tamaka, Kshudra.

- Mahati is the condition due to Vata increased greatly, moves upward making with heavy sounds of respiration.
- Urdhwa is the condition of long expiration, inability of respiration filled with sputum.
- Chinna Shwasa is the condition in which the respiration is often interrupted in the middle with severe distress of respiration.
- Tamaka Shwasa is the condition of bronchial asthma. The symptoms increased in cloudy days.

• *Kshudra Shwasa* is because of physical efforts, anxiety, use of dry foods.

DISCUSSION-

The drugs which relieve breathlessness or asthma are termed as Shwsahara Dravyas[3] Viz; Shati(Hedychium spicatum Buch-Ham, Zingiberaceae), Pushkaramula (Inula racemosa Hook.f Compositae), Amlavetas (Garcinia pedunculata Roxb, Guttiferae), Ela (Elettaria cardamomum Maton, Zingiberaceae), Hingu (Ferula narthex Boiss, Umbelliferae), Agaru (Aquilaria agallocha Roxb, Thymelaeceae), Tulasi (Ocimum santum Linn, Labiatae), Bhumyamalaki (Phyllanthus urinaria Linn, Euphorbiaceae), Jeevanti (Leptadenia reticulata Asclepiadaceae), Chanda (Angelica glauca Edgew, Umbelliferae)

SHATI(Hedychium spicatum Buch-Ham, Zingiberaceae) [4],[5],[6],[7],[8],[9],[10]

Shati is Laghu (Light), Teekshna (Penetrating), Katu (Pungent), Tikta (Bitter), Kashaya (Astringent) in tastes. Katu Vipaka (Pungent at post digestive effect), Ushna Virya (Hot in potency), Kapha Vatashamaka. It cures Shotha (Edema), Shwasa (Dyspnea), Kasa (Cough), Hikka (Hiccough), Jwara (Fever), Rakta Dosha, Kandu (Itching), Vrina (Wound), Vedana (Pain), Durgandha (Foul smell), Keshya (Hair tonic), Dipana (Appetizer), Shoolaprashamana (Antispasmodic), Grahi (Absorbent), Graha (Evil spirits).

PUSHKAMOOLA(Inula racemosa Hook.f Compositae) [11],[12],[13],[14],[15],[16],[17]

Pushkaramoola is Laghu (Light), Teekshna (Penetrating), Tikta (Bitter), Katu (Pungent) in tastes, Katu Vipaka (Pungent in post digestive

effect), Ushna Virya (Hot in potency), Dipana (Appetizer), Pachana (Digestives), Balya (Tonic). It subsides Kapha and Vata Doshas, It alleviates Kapha-Vataja Vikaras, Vrina (Wounds), Shotha (Edema), Adhmana (Abdominal distention), Ajirna (Indigestion), Hridayashoola (Cardiac pain), Shwasa (Dyspnoea), Kasa (Cough), Hikka (Hiccough), Jeerna Jwara (Chronic Fever), Amavata (Rheumatic conditions), Parshwashoola (Pain in the sides of the chest).

$AMLAVETAS (Garcinia\ pedunculata\ Roxb,$ $Guttiferae)^{[18],[19],[20],[21],[22],[23]}$

Amlavetas is Laghu (Light), Ruksha (Dry), Teekshna (Penetrating), Amla Rasa (Sour taste), Amla Vipaka (Sour at post digestive effect), Ushna Virya (Hot in potency), Kapha-Vatashamaka (Subsides Kapha and Vata Rogas), Dipana (Appetizer), Pachana It alleviates Aruchi (Loss of (Digestive). appetite), Anaha (Distention of abdomen), Ajirna (Indigestion), Vibandha (Constipation), Gulma (Visceral organ diseases), Pleeha (Spleen diseases), Yakrita Roga (Liver diseases), Hritshoola (Cardiac ailments), Hikka (Hiccough), Kasa (Cough), Shwasa (Dyspnoea), Mutrakrichra (Dysuria), Ashmari (Urinary calculi).

ELA(Elettaria cardamomum Maton, Zingiberaceae)^{[24],[25],[26],[27],[28]}

Ela is Laghu (Light), Ruksha (Dry), Katu (Pungent), Madhura (Sweet) in taste, Madhura Vipaka (Sweet at post digestive effect), Sheeta Virya (Cold in potency), Balya(Tonic). It cures Vata-Pitta and Kaphaja diseases, Mutrakrichra (Dysuria), Mukha Roga (Diseases of mouth), Vamana (Vomiting), Trishna (Thirst), Aruchi (Loss of appetite),

Udarashoola (Pain abdomen), Adhmana (Flatulence), Arsha (Haemorrhoids), Hridya Daurbalya (Cardiac ailments), Kasa (Cough), Shawasa (Dyspnoea), Hikka (Hiccough), Daha (Burning sensation), Kshaya (Emaciation).

HINGU(Ferula narthex Boiss, Umbelliferae)^{[29],[30],[31],[32],[33],[34],[35]}

Hingu is Ushna (Heat), Katu(Pungent), Pachana(Digestive), Ruchya(Promotes taste), Teekshna(Penetrating), Laghu(Light), Snigdha(Demulcent), Balya(Tonic), subsides Vata and Kapha. It cures Ajeerna(Indigestion), Shoola(Colic), Gulma(Intestinal growth), *Udara*(Abdominal disorders), *Krimi*(Worms). Increases Pitta, Vibandha Nashaka(Relieves constipation). It alleviates Hridroga(Cardiac ailments), Shwasa(Dyspnoea), Kasa(Cough), Bastishoola(Pain in bladder), Jwara(Fever), Prashamana(Relieves Sheeta cold), Krimi(Worms), Klaibya(Sexual debility).

$AGARU(Aquilaria agallocha Roxb, \\ Thymelaeceae)^{[36],[37],[38],[39],[40],[41],[42]}$

Agaru is Laghu (Light), Ruksha (Dry), Teekshna (Penetrating), Snigdha (Demulcent), Guru (Heavy), Balya (Tonic), Katu (Pungent), Tikta (Bitter) in taste, Katu Vipaka (Pungent at post digestive effect), Ushna Virya (Hot in potency). It subsides Kapha and Vata Doshas, Vrina (Ulcers), Shotha (Edema), Sandivata (Osteoarthritis), Amavata (Rheumatoid arthritis), Agnimandya (Loss of appetite), Hidaya Daurbalya (Cardiac weakness), Rakta Vikara (Blood disorders), Shwasa (Dyspnoea), Kasa (Cough), Hikka (Hiccough), Sheeta Jwara (Fever with chills), Kustha (Skin diseases), Krimi (Worms). It is also used as Vajikara (Aphrodisiac).

TULASI(Ocimum santum Linn, Labiatae) [43], [44], [45], [46], [47], [48], [49]

Tulasi is Laghu (Light), Ruksha (Dry), Katu (Pungent), Tikta (Bitter) in taste, Katu Vipaka (Pungent at post digestive effect), Ushna Virya (Hot in potency), Balya (Tonic). Its main action is anti-tubercular action. It subsides Kapha-Vata Doshas, Kustha (Skin diseases), Karnashoola (Earache), Agnimandya (Loss of Vishmabhi (Constipation), Krimi appetite), (Worms), Hridayadaurbalya (Cardiac diseases), Raktavikarasa (Blood diseases), Shwasa (Dyspnoea), Kasa (Cough), Parshwashoola (Pain at the side of the chest), Mutrakrichra (Dysuria), Jwara (Fever), Sheeta Pradhana Jwara (Fever with chills).

BHUMYAMALAKI (Phyllanthus urinaria Linn, Euphorbiaceae)^{[50],[51],[52],[53],[54],[55],[56]}

Bhumyamalaki is Laghu(Light), Ruksha(Dry), Balya(Tonic), Tikta(Bitter), Kashaya(Astringent), Madhura(Sweet) tastes, Madhura Vipaka(Sweet digestive effect), Sheeta Virya(Cold potency). It subside Kapha-Pitta Doshas. It alleviates Kshata(Injury), Vrina(Wound), Shotha(Edema), Kustha(Skin diseases), Aruchi(Loss of appetite), Thrishna(Thirst), Kamala(Jaundice), Amlapitta(Hyper acidity), Rakta Vikara(Blood diseases), Shwasa(Dyspnoea), Kasa(Cough), Hikka(Hiccough), Prameha(Urinary diseases including diabetes), Jeerna Jwara(Chronic fever), Visha(Poison effect).

JEEVANTI(Leptadenia reticulata W & A. Asclepiadaceae) [57], [58], [59], [60], [61], [62], [63]

Jeevanti is Laghu (Light), Snigdha (Demulcent), Madhura (Sweet) taste, Madhura Vipaka (Sweet at post digestive effect), Sheeta

Virya (Cold in potency). Rasayana (Vitalizer). subsides Vata-Pitta-Kapha Doshas, Chakshushya (Good for eyes), Shotha (Edema), Visthambi (Constipation), Grahani (Sprue syndrome), Hridaya Daurbalya (Cardiac weakness), Raktapitta (Bleeding diseases), (Cough), Shwasa Kasa (Dyspnoea), Shukrameha (Spermaturia), Mutrakrichra (Dysuria), Mutradaha (Burning micturation), Jwara (Fevr), Kshaya (Emaciation), Yakshma (Tuberculosis).

CHANDA or CHORAKA (Angelica glauca Edgew, Umbelliferae)^{[64],[65],[66],[67],[68],[69]}

Laghu Chanda is (Light), Teekshna (Penetrating), Katu (Pungent), Tikta (Bitter) in tastes, Katu Vipaka (Pungent in post digestive effect), Ushna Virya (Hot in potency). It subsides Kapha and Vata Doshas. It is Balya(Tonic), Medhya(Brain tonic), Dipana (Appetizer), Pachana (Digestives), Hridya (Good for heart). It alleviates Hridaya Daurbalya (Cardiac weakness), Shwasa (Dyspnoea), Kasa (Cough), Hikka (Hiccough), Kustha (Skin diseases), Jwara (Fever). Vishagna (Anti-Poisonous). It is used in Manovikara (Psychological disorders), Udarashoola (Pain abdomen), Adhmana (Flatulence).

CONCLUSION:

By the above discussion it is conclude that all the drugs mentioned in this group are *Laghu* (Light), *Ruksha* (Dry), *Teekshna* (Penetrating) properties, and also have *Katu* (Pungent), *Tikta* (Bitter) in tastes, *Katu Vipaka* (Punget at post digestive effect), and *Ushna Virya*(Hot in potency). By these properties the drugs helps to alleviate *Shwasa* (Dyspnoea), *Kasa* (Cough), *Hikka* (Hiccough), *Hridaya Rogas* (Cardiac

problems). Here an attempt is made to highlight these drugs with their pharmacological actions, properties. Further scope of study is to evaluate their anti-viral activity which causes the breathlessness or asthma.

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