Brihatrayees Approach to the Application of Surgery in Toxicology

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Abstract: Charaka Samhitha, Susrutha Samhitha and Ashtanga Hridaya are the three text books which are considered as Brihatrayees in Ayurveda. Acharya Charaka mentioned Shalya karmas like Utkarthanae incision, Upadhanae medicinal application on incised scalp, Rakthamokshanae bloodletting, Prathisaranae bloodletting by rubbing with leaves, Agnikarmae thermal cauterezation, under Chathurvimshathiyapakramasie twenty four treatment modalities of the treatment of Visha. There are references of Chedhanae excision, and lekhanae scraping also in Visha Chikitsa. This article is an attempt to emphasize different Shalya Karmas in Visha Chikitsa as per Brihatrayees.

Keywords: Charaka Samhitha, Susrutha Samhitha, Ashtanga Hridaya, Rakthamokshana

1. Introduction

Agada Tantra and Shalya Tantra are two branches of Ashtanga Ayurveda. Agada Tantra or Visha Chikitsa is a branch of medicine which deals with different types of Poison, its diagnosis, combination of poison and its treatment. Shalya Tantra is a branch of medicine which deals with different types of foreign bodies and the different types of instruments and techniques used for its extraction¹. Agada Tantrais Toxiconology and Shalya Tantra is Surgery as per modern parlance.

Rakthamokshana, Agnikarma and upadhana are the main Shalyakarmas for Visha Chikitsa mentioned in Brihatrayees. Rakthamokshana, Agnikarma, Utkarthana, Prathisarana and Upadhana are mentioned in Charakoktha Chathurvimshathi upakrama². Rakthamokshana is done by Prachchanna, Shringa, Jalouka and Siravyadhana³. Rakthamokshana is indicated in Visha Chikitsa, when the patient is suffering from discolouration, hardness, swelling and pain in the affected area⁴. The phenomenon by which Visha moves from one dhatu to another dhatu penetrating the kala is called Vega⁵.

Utkartana

Utkartana is an incision done at the site of bite⁶. Visha remains at the site of bite for hundred matra kala, (Matra is the time needed to blink the eyes once) and then it vitiates the dhatus like raktha and spreads all over the body. In that case, utkartana should be done immediately at the site of bite⁷. This site should not be a marma sitana⁸. In Snake poisoning, after removing the tourniquet, incision is indicated⁹. In spider poisoning, the first line of treatment is Utkartana¹⁰.

Pratisarana

Pratisarana is bloodletting by rubbing the area with leaves. If blood does not come out of the site of bite, then rub the area with drugs like trikatu (Zingiber officinalis, Piper nigrum, Piper longum), Grihadhooma (soot), Rajani (Curcuma longa) etc¹¹. In poisoning caused by poisoned toothbrush, prathisarana is indicated.

Prachchanna

Prachchanna is bloodletting done by pricking with fine needles. In the first Vishavega of Darveekara Sarpa and Mandali Sarpa¹², Prachchanna is indicated. In Kaanda Sarpa, a Snake which is mentioned in Ashtanga Hridaya, Prachchanna is indicated¹³. In rat poisoning also prachchanna is indicated¹⁴.

Siravyadhana

In Visha Chikitsa, Siravyadhana should be done in a sira which is nearer to the site of bite. If the Visha spreads throughout the body, then Siravyadhana should be done on leg, hand and temples¹⁵. When Visha is situated in Kaphasthana or rakthasthana or in case of Dooshii Visha, Sira Vyadhana is indicated¹⁶. In the first Vishavega of Darveekaran and Mandali Sarpa, Siravyadhana is indicated¹⁷, ¹⁸. In rat poisoning and in Spider poisoning, Sira Vyadhana is indicated¹⁹, ²⁰. But Siravyadhana is contra indicated in pregnant ladies, children and elderly²¹.

Jaloukavacharana

Jaloukavacharana is bloodletting done with leeches. In case of patients effected with poisonous weapon, the area get putrified and then bloodletting in the form of jalouka is indicated²². In poisoning cases with the predominance of pitta, jalouka is indicated²³. If sira which is near to the site of bite is invisible, then jalouka is indicated²⁴. In Krishna
Sarpa, a snake mentioned in Ashtanga Hridaya also jaloukais indicated26.

**Shringavacharana**

Shringa is a method of inducing bloodletting using horns of animals, by creating a vacuum. In the first Vishavega of Darveekara27 and Mandali Sarpa26, Shringa is indicated. If Sira which is nearer to the site of bite is invisible, due to Shobha, then Shringa is indicated29. In Spider poisoning, Shringa is indicated30.

**Alabu**

Alabu is another method of inducing bloodletting using a hollow vegetable on the principal of cupping. In the first Vishavega of Rajila, Alabu is indicated for performing rakthamokshhana31.

**Upadhana**

Medicines kept on incised scalp is known as Upadhana. It is one among the Chatuvimshathipakrama. It is called Upadhana because ‘bheshajadihdha’ which is application of drug which can absorb poison, after making an incision, is done in this treatment modality32. When the channel of circulation of kapha gets vitiated by poison, then this causes obstruction in the channels and thus stops the movement of vayu. As a result of this, the patient develops breathlessness as if he is going to die. If the patient is free from the signs and symptoms of incurability, then an incision in the shape of paws of crow is made and one bilva amount of Charmakashaya (Sapthala) or its paste should be applied over it. Upadhana is also called ‘Kakapada’ since the incision is in the shape of paws of crow. The meat of cock, buffalo or goat can also be applied over the incision to absorb the poison33. In the process of regaining the life of a patient who is apparently dead, which is called Mritasanjanjevana, Kakapada is indicated34. In the seventh samanya Vishavega, Kakapada is indicated35. In Susrutha Samhitha, it is mentioned that a sharp instrument is to be used for making the incision in Kakapada and flesh, blood and skin of animals should be kept over the incision to absorb the poison36. In the seventh Vishavega of Darveekara, Mandali and Rajila Sarpa, Kakapada is indicated37, 38. In the seventh Vishavega of Sthavara Visha (immobile poison) also, Kakapada is indicated39. If the patient is bitten by a poisonous creature at the lower part of his body, then kakapada should be done at the scalp and meat as well as blood of cock, crow and peacock should be applied over it. If the bite is in the upper part of the body, then kakapada should be done on the feet and meat as well as blood of cock, crow and peacock should be applied over it40.

**Chedhana and Lekhana**

Chedhana is excision and Lekhana is scraping. Chedhana and Lekhana are indicated when Visha is kaphaja in nature41. In case of formation of Karnika which is a hard mass formed at the site of bite, Chedhana is done42. In case of insects which are having the predominance of Kapha, Chedhana and Lekhana are indicated43.

**Agnikarma**

Agnikarma or thermal cauterezation is done, when Visha is situated in skin and flesh44. If it is not possible to tie the tourniquet at the site of bite, then Agnikarma is indicated45. In rat poison and in rabies, Agnikarma is done with hot ghee at the site of bite46, 47. In spider poisoning, Agnikarma is done with an instrument called Vridhipatra or else with jamhavoshthashatra at the site of bite48, 49. There is another reference that in rat poisoning, Agnikarma is done with a piece of stem or trunk or with a hot glass piece50. If a patient is suffering from a wound produced by a poisonous weapon, Agnikarma is done with a hot iron piece51. Agnikarma is contraindicated in Mandali Sarpa because Mandali Sarpa is having the predominance of pitta and if Agnikarma is done, it leads to the vitiation of pitta, resulting in burning sensation and vesicles52. Agnikarma is also contraindicated in spider poisoning which is having predominance of pitta53. If the site of bite of spider is hard, devoid of hair and is situated in Marma, then Agnikarma is contraindicated54.

Rakthamokshhana is considered as the most important treatment procedure in Visha, because vitiation of rakthi vitiate other dhatus and leads to the death of the person55. By doing rakthamokshhana, entire poison is eliminated from the body56. Utkartha also plays a similar role where as Upadhana and Pratisarasana are pacifying measures. Agnikarma is also important because agnikarma can destroy the poison from its roots with in a very short time period57. Depending upon the conditions of the patient, the appropriate treatment should be adopted wisely. Though these treatment modalities are used rarely in practice, there remains a large scope of research in this area.

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