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Review Article

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A CONCEPTUAL STUDY ON THE ROLE OF SIDDHA PARASURGICAL PROCEDURES IN THE MANAGEMENT OF CHRONIC WOUND

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ABSTRACT

An ideal wound healing is yet to be discovered inspite the tremendous medical advancement in current science. Siddha system of medicine has recognized surgery as one of its branches of treatment. There are 32 types of classified Pura maruthuva Muraigal (Siddha therapies and external application methods) mentioned in ancient Siddha Literatures. Most of these therapies are aimed at maintaining a healthy balance of the three physiological factors or humors (Tridosham), vaatham, pittham, kapam and also seven bodily constituents. This review throws light on Siddha Para surgical procedures which have significance primarily in management of

chronic non healing wound.

KEYWORDS: (Tridosham), vaatham, pittham, kapam.

INTRODUCTION

Ancient Indian siddha surgical science describe details of wound management. Its surgical practice covered all aspects of surgery which are pre, post-surgical procedure and surgery process with sterilization & disinfection techniques. This system had an unambiguous surgical management and no less than the modern surgical procedure.

According to siddha science *Viranam* is defined as discontinuity of skin tissue in any part of the the body. Depending upon the symptoms ulcer is classified into two types they are Thutta

viranam, Athutta viranam in the text Agathiyar Rana Vaithiyam. The book Siddhar Aruvai Maruthuvam explains the properties of Curable and incurable wound as follows.

Curable

- Age of affected person.
- If the shape of the ulcer is oval, triangle, rectangles are easily curable.

Incurable

- Improper medication may delay the wound healing process.
- Chronic ulcer with secondary infections such as TB, leprosy which may delays the wound healing process.
- If ulceration develops in eyes, nostrils, abdomen, chest and joints may interrupts the wound healing process.
- Ulcer with increased purulent discharge, raised floor, extensive and localized gangrene, osteomyelitis, deep ulceration with bone and tendon, joints this condition are difficult to treat.
- If the ulcer occur in vertex, fingertip, vital points, deep seated wound which penetrate the bone and bone marrow are difficult to treat.

Commonly forms of medication used in the wound management are kashayam (medicated decoction), varti (wound plug or lint), karkam (medicinal paste), kalimbu (medicated ghee), thylam(medicated oil), Neer(medicated aqueous extract), podi(medicated powders), pugai(fumigation). These forms are utilized in enabling a wound to attain healthy and healing stage from infective stage. The local wound management by using drugs provide moisture absorbing, cleansing, debriding, analgesic, anti -inflammatory, anti-microbial, wound healing properties on the infective ulcer and thereby promotes healing.

Role of different external therapies in the wound management

Kattu-compress or bandage

Kattu is an application of covering of a specially prepared topical medicine made up of crude plants, birds, fermented water or inorganic substance on the affected area This procedure is usually done for three times, at an interval of 3-7 days. It is essentially a procedure of fresh bandaging of crude or boiled plants, birds in vinegar and inorganic salts on the affected area to protect, immobilize, compress or support a wound, swelling, abscess or injured body part.

According to text of Viranakarappan Roga Sigitchai- Banthanam (Bandaging); There are 15 types of bandaging methods are described Kosabandhanam Svasthiga banthanam Muthhtoli banthanam Seena banthanam Thaama banthanam Anuvellitha banthanam Katvaa banthanam Vibantha banthanam Sthagitha banthanam Vithaana banthanam Uthsanga banthanam Koobana banthanam Yamaga banthanam Mandala banthanam Panchanga banthanam.

It helps to control bleeding and protect against infection. Dressing with pads of gauze or cloth that can be placed directly against the wound to absorb blood and other fluids.

Bandage provides a safe guard against contamination and prevents secondary infection. It's also helps faster healing as restricted movements help wound healing to great extent.

Indication

Abscess

Carbuncles

Supperative and Non supperative ulcer

Scrotal swelling

Lymphadenitis

Contraindication

Deep ulcers with foreign bodies

Cellulitis

Duration

3 hours

Shelf-life period

Not mentioned

Patru-semisolid poultice

The raw materials are either ground or juices of leaf, bark, root are heated or not heated and applied or paste on the affected area.it is a soft moist mass, usually made up of herbals which is applied in the skin diseases, abscess as emollient, anti-microbial and anti-allergic. This method is commonly used to treat wound and abscess where the built up pus needs to draw out.

Indication

Abscess

Carbuncle

Initial stage of ulcer

Swelling

Contraindication

Deep ulcers

Gas gangrene

Cellulitis

Duration

3 hours for 7 days

Shelf-life period

Not mentioned

Poochu- liqid poultice

This is the external application of leaf juice in affected area, normally the medicine in the liquid form either in oil base or water base is spread evenly on affected area. Its develops a thin layer spread on the affected areas due to its liquid nature.it is also called as ellai poochu, kashaya poochu, ennai poochu etc.this procedure invoves the purification, lubrication, moisturization, local healing, analgesic.

Indication

Wounds

Sinus ulcers

Fissure foot

Ulcer with hyperpigmentation

Contraindication

Cellulitis

Traumatic ulcer

Duration

15-30 minutes

Shelf-life

Not mentioned

Kalimbu-oinment application

It is a viscous semisolid preparation used topically on a variety of body surface. mineral drugs and wound healing drugs and astringent drugs are usually ground with butter and applied to the wounds. Bee wax, shorea robustra can also be used as a base, wound healing, removal of slough and infection control are the key function of the activities in the ointment.

Indication

Chronic skin ulcers

Fissure

Abscess

Glandular swelling

Arthritis

Contraindication

Direct contact with eyes

Duration

5-10 minutes

Shelf-life

1 year

Seelai-plaster application

This type of external medicine is in the form of medicated plasters. Plasters are prepared by grinding herbal or mineral material in water or herbal juices. A piece of cloth is soaked in this and externally applied over wounds. A medicated gauze is used for the application of a wound in order to promote healing and prevents further harm. This method is absorbed the exudates and debris from a wound and promotes the healing by fastening the epithelial formation.

Indication

Chronic non healing ulcers

Fissures

Abscess

Fistula

Contraindication

Malignant growth using caustic plasters

Duration

12 hours

Shelf-life

6 months

Neer-medicated liquids

Neer is defined as the method of soaking the drugs into the water or making a decoction or dissolving the dry powder into the water and the filtered solution is applied on the affected area to treat or wash.

E.g. padigara neer, veera neer, vengara mathirai are used in washing wounds.

Indication

Acute and chronic ulcers

Apthous ulcer

Eczema

Gingivitis

Fissure

Fistula

Contraindication

Perforation ulcer

Necrosis

Duration

6 hours

Shelf-life

3 months

Varthi-medicated wick

This type of external medicine is in the form of medicated wicks. Caustic substances are ground well with herbal juices or decoctions, a piece of cloth soaked in this and a wick is prepared. This wicks are applied or inserted into granulomatous tracks in fistula, sinus, non-healing ulcers.

The wicks prepared by corrosive substances increases the size of sinus and disintegrate the necrosed tissuses from the ulcer. Wick prepared from astringent substances can be applied to arrest bleeding through nose, rectum, and vagina.

Indication

Abscess

Carbuncle

Chronic and perforated ulcer

Fistula

Sinus

Infected ulcer with tissue growth

Contraindication

Septicemia

Duration

6 hours

Shelf-life

3 months

Pasai-embrocation application

Pasai is defined as the mixture of medicated powders with specific oil, melted honey, bee wax. Its otherwise called as lepam or mezhugu. These are semi-solid lipid or resin or gum based application. Usually fats are used as bases of vegetable oil and bee wax. They protect and stay in the skin as emollient for a long time.

Indication

Abscess

Ulcer arthritis

Glandular swelling

Contraindication

Direct eye contact

Duration

5-10 minutes

Shelf-life

1 year

Podi-medicated dust or powder application

Podi is defined as the finely powdered raw drugs used to sprinkle affected areas. It is dusted over the chronic weeping or purulent wound. It has two types one is dry powder for sprinkling, dry powder mixed with oil or liquids. This application on wound exudate act as barrier against infection.

Indication

Wound

Non healing ulcer

Apthous ulcer

Eczema

Hemorrhoids

Gingivitis

Contraindication

Eyes and nasal application

Nasal inhalation

Duration

6-12 hours

Shelf-life

3 months

Suttigai-cauterization

This is destruction of tissues with a cautery. They are traditionally used to stop heavy bleeding, this would cause tissues and blood to heat rapidly to extreme temperature causing coagulation of the blood this control bleeding. According to the physical nature and administration, it is classified into five types, mann suttigai(application of mud or stone), mara suttigai(application of hot plantparts), kaal suttigal(application of hot air), kaanthi suttigai(application of sun rays), uloga suttigai(application of hot metals).

Indication

Wounds especially bleeding ulcers

Non healing ulcer

Infected ulcer with tissue growth

Scrotal swelling

Nasal bleeding

Carbuncle

Deep ulcers

Fistula

Contraindication

Burn shock

Dehydration

Keloid

Sun stroke

Duration

2-5 seconds

Shelf-life

Not mentioned

Pugai-fumigation

Fumigation is method of applications in which the medicated fume is generated by burning the drugs directly or putting the drugs into the fire. It commonly exposed on the site or exposing fume on septic wound by burning a medicated wick.

Indication

Chronic non healing ulcer

Fistula

Sinusitis

Unconsciousness

Contraindication

Status asthmaticus

Suffocation

Immediately after eye operation

Duration

10 -15 minutes for 7 days or 7 times

Shelf-life

Not mentioned

Urinjal-pipe aspiration

Urinjal is a suction process using a special probe or aspiration process using a needle to exudates the waste fluid or unwanted fluids from the body parts.it plays an important role during surgical process to aspirate and drain the accumulated fluids such as pus, blood.

It is classified into two types, there are aspiration using a fine needle, suction using a long probe.

Indication

Abscess

Carbuncle

Cyst

To remove unwanted material from deep-seated ulcer.

Contraindication

Blood coagulation

Coronary artery disease

Duration

30-45 minutes

Shelf-life

Not mentioned

Kuruthi vangal- Instrumental Blood Letting

Kuruthi vangal is an external method of application of sharp instruments to leak or remove the blood from the abscess, cyst, keloid or the area where the accumulated blood are seen. In this type of treatment a minor incision is made on the blood vessel and the excess of blood is let out. Types are, one is incision to let normal blood in bloodletting therapy and another one is incision to let purulent or impure blood from the affected area.

Indication

Swelling

Transudate and exudate

Abscess

Cyst

Thrombosis

Contraindication

Anemia

Convulsion

Emaciating disease

Pregnancy

Tuberculosis

Duration

5-10 minutes

Shelf-life

Not mentioned

Keeral-incision and drainage

Keeral is an incision to remove blood or pus or mucus from the abscess, cyst. Keeral or incision helps to remove the accumulated pus, blood by using the sharp probe. The sharp

probe used for this called kombi, it's about 25 cm length, and in brow shape. keeral or incision is used after reduction of inflammatory changes in the abscess. In this method, an incision is made over the boils, abscess, carbuncles, acne etc. so as to drain the accumulated pus, blood, water etc.

Indication

Abscess

Carbuncle

Sebaeceous cyst

Contraindication

Blood coagulation disorder

Coronary artery disease

Tumour

Duration

6-12 hours

Shelf-life

Not mentioned

Karam-chemical cauterization

Kaaram is application of caustic chemicals on the affected area to excise or remove the unwanted tissue or slough and debris. This procedure used to remove the slough, debris and unwanted growth and improves the healing process of the non-healing ulcer. Application of caustic substances could be direct or medicated wick or gauze or plaster may be kept in position. It is a method of inducing blisters or ulcers or dissolving the cutaneous tissue on the particular area where the unwanted tissue growth are seen. The method of destruction of tissue using a hot chemical like latex, sodium carbonate, mineral to complete removal of tissue and prevent the recurrence. It is the method of the application of medicated caustic drugs over the area of the chronic ulcers.

Indication

Abscess

Chronic non healing ulcer

Cancerous foul smell growth

Fistula

Hemorrhoids

Warts

Contraindication

Pain shock

Localized gangrene

Deep seated ulcer

Duration

5-15 minutes

Shelf-life period

Not mentioned

Attai vidal-leech therapy

Attai vidal is an external method of application of medicinal leech to remove impure blood from the affected site. Wound management by leech therapy can used to treat chronic venous ulcer, non-healing ulcers. No of leech depends upon the site and nature of diseases. Leech saliva contains the presence of a variety of bioactive peptides, proteins involving anti-thrombin and anti-platelet, factor Xa inhibitors and others, these active molecule used to treat many chronic illness.

Indication

Varicose ulcer

Varicose eczema

Alopecia

Keloid

Rheumatoid arthritis

Dysmenorrhea

Tennis elbow

osteo arthritis

Hiccough

Contraindication

Blood coagulation disorder

Coronary heart disease

Duration

Maximum 45 minutes

Shelf-life period

Not mentioned

SUMMARY AND CONCLUSION

Siddha system of medicine serves to bridge the gap between the conventional management of wounds and limb salvage by facilitating the faster wound healing. Due to the escalating cost of health care especially in wound management, it is economical to use traditional medicine to treat wounds. However, large randomized clinical trials are necessary to give more concrete evidence supporting the use of traditional medicine in wound management. Thus siddha medicine holds good promise for the management of wound therapy in future.

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