

AN APPRAISAL OF INCISION FOR ABSCESS DRAINAGE – SUSHRUT’S VIEWPOINT

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ABSTRACT

Acharya sushrut has contributed enormously to the advancement of Ayurveda in all aspects particularly surgery. He has described all kind of incision for different kinds of abscess. This article elucidates the guidelines for incision for abscess in different external part of body. He has mention particular incision type for particular body part. Apart from the brilliant detailing of drainage of abscess by invasive method, foremost description of a non-invasive method for drainage of abscess is found in the sushruta’s treatise. Various surgical methods for abscess drainage such as Hilton’s method, counter incision is foremost mentioned in Sushrut samhita. Acharya sushrut has even mentioned the ideal qualities of a good incision and specific incision in vital parts of the body.

KEYWORDS: Abscess, Incision, Hilton’s method, Counter incision.

INTRODUCTION

Sushrutsamhita is legendary text of Ayurveda hallmarked with knowledge of anatomy and surgical skill of high caliber. The concept of incision is first given by Acharya Sushrut with proper indications. The exquisiteness lies in the characteristics of ideal incision, when to incise, the concept of incision for non-recurrence of the abscess and why Acharya sushruta’s method is strictly correct for complete drainage of the abscess. It self suggests virulence of disease According to Acharya Sushruta, if Vidradhi attains Pakva avastha, the first line of treatment is to drain pus through bhedana karma (incision) and later, it should be treated as a Vrana.

Abscesses can arise in any part of the body, but occur most often in the skin. Abscesses occur when the skin is punctured or compromised and bacteria or foreign material gets into the soft tissue below. An inflammatory response is set off as the defense mechanism of the body tries to kill the bacteria. Thus, an abscess is a collection of pus in a cavity formed by disintegrating tissue and surrounded by inflamed tissue. Abscess is understood as vidradhi in Ayurvedic classics, which is classified into 2 varieties as Bahya and Abhyantara. In this work we are dealing with Bahya Vidradhi for the appraisal of incision and drainage.

Sushrut samhita written as early as about 1000 B.C., describes a systemic scientific methodical description of abscess drainage. The details of guidelines for incision by Acharya Sushrut is mentioned below.

Selection of the case and proper diagnosis of abscess

A surgeon must be crystal clear in his concept to identify the indicated abscess appropriate for the drainage. Inadequate knowledge and poor planning give birth to mistakes and medical error. He must be able to differentiate the non suppurative stage with the suppurative stage of the abscess. Short coming in selection of the case or the diagnosis of the clinical entity are sure to complicate the condition.

So proper selection is must and proper timing for drainage should be identified. If the technique is performed on unaccommodating state, then it will not yield good clinical outcome.

Acharya Sushruta’s criteria of deciding the stage of abscess

Acharya sushrut has given many causes for the swelling, one of them is abscess.^[1] Acharya sushrut has even mentioned characteristics of non- suppurative and suppurative swelling (i.e. abscess) Incision and Drainage (Bhedan) is the standard line of treatment for Vidradhi/uncomplicated superficial skin abscesses.

Characteristics of non-suppurative abscess - The underlying swelling look similar to surrounding skin in texture, there is no local arhythmia, may less pain and mild swelling.^[2]

Characteristics of suppurative swelling (i.e. abscess) – There is pricking pain at the site of abscess and pain resemble to that causes by any sharp object, throbbing pain, burning pain, pressure pain.^[3] Thus by this, we can identify the suppurative abscess and that is the right time to plan for the drainage.

Principles of drainage

(1) Wherever there is pus, let it go - this quote has its inspiration by Acharya sushruta's verse. Which ever direction the track lead and wherever pus pockets are present, at all those places incision should be made so that no morbid element remains. So the basic rule of Acharya sushrut's management of abscess is – **don't let the pus to stay inside.**^[4]

(2) Always make incision in suppurative state.

(3) Site & shape of Incision - Incision should be planned in such a way that it should not injure the vital points, vessels, ligaments, joints or bone or nerve tissues. To avoid injury to such parts Acharya sushruta has indicated the type and shape of incision to be done for specific site i.e -in vital area even when the abscess is spread to a large area but the measurement of incision should only be 2 cm or 3 cm.^[5]

Specific shape of incision

- (1) Oblique incision:** The incision should be in the following regions – the eyebrow, cheek, temple, forehead, eyelids, lip, gum, axilla, belly and the Groin.^[6]
- (2) Curved incision:** Intelligent surgeon should make the incision like a half moon in the hands and the feet and the like the half-moon (semicircular) about the anus and the penis.^[7]
- (3) Incision in fistula:** Since the abscess is precursor for the formation of fistula, so Acharya sushruta has even mentioned the specific type of incision in specific type of fistula. i.e.- The shape of incision in fistula resemble to that of half plough, orbital or circular and to that of hoof of the cow. These specific incisions prevent the underlying vital parts from being incised.^[8]

Ideal incision

Acharya Sushrut has even mentioned the characteristics of an ideal incision. A good incision should be of adequate length and extensibility should have regular and uniformly cut edges and should have no pockets.^[9] He even mentioned the condition for best incision in surgery. The incision made at an appropriate time, of an adequate length, extensible, having regular and uniformly cut edges and leaving no pockets is considered to be the best incision in surgery.^[10]

Procedure of abscess drainage

Following the due pre-operative care and preparation, the affected part should be incised paying due respect to the vital structures of the body by not injuring them. The direction of incision by a surgical knife should be in above downward direction (anulomagati by Acharya sushrut's terminology) and it should reach the abscess cavity, later knife should be swiftly drawn out. After incising the cavity, for drainage of pus, a firm pressure is to be applied by gentle rubbing or pressing with figure at the wound margin. Entire cavity should be thoroughly squeezed to it out the pus. Acharya Sushruta's emphasis of using figure to break the pus pockets is suggestive of utility and importance of hand as an instrument in operative procedure as given in verse. i.e. Hand is the most important surgical instrument.^[11] A special caution is directed while incising the abscess cavity located over vital structures, where the incision should not be deep enough to injure the vital structures beneath.

Theoretical concept of counter- incision by Acharya sushruta

In case of larger cavities of pus, counter incision should be made to measure 2-3 fingers width in length.^[12] When one incision is not enough to drain the complete pus or most prominent part is not most dependent part, a counter incision should be given at some distance to facilitate the complete drainage of pus. The reason behind it is that when the most prominent part is not the most dependent part complete drainage of pus is not possible. So a counter incision is required at the most dependent part to facilitate drainage by gravity. Through the first made incision in most prominent part, artery forceps is pushed to the most dependent part, The blades are slightly made apart, then with a knife a fresh incision is made on the skin between the tips of artery forceps.

Non-invasive method of drainage of abscess

It is a unique method of drainage affected by Acharya sushrut for the patients who have less pain with standing capacity, such as children or old age patients. In this method, drug possessing hot potency (usna virya) and having pungent, astringent, salt taste is preferred. The paste of herbs of these properties are made warm and applied on suppurative abscess for facilitating its spontaneous bursting.

Complications of incision of unsuppurative abscess

Acharya sushruta's brilliance and intelligence surpasses all as he has even mentioned complications due to nonsuppurative abscess drainage. Incision of non-suppurative swelling causes destruction of muscles, vein, ligaments, bones and joints, excessive bleeding, excruciating pain, tearing of muscle and tendons and even formation of traumatic abscess.^[13] If the surgeon cannot identify the suppurative case and leave that for long duration, even then the excessive collection of pus can enter deep tissue and increased pressure can cause tearing of the underlying parts along with formation of deep sinus, which then become very difficult to treat.

CONCLUSION

In the above study an effort was done to elaborate the importance of the incision advised by Acharya Sushrut for the management of abscess. Acharya Sushrut's contribution in the field of medicine and surgery is enormous. He was a legendary surgeon and teacher. His unparalleled concept of surgery and rational ideas in the field of surgery are precious gifts in the surgical practice. He has detailed the scientific and systematic methods of drainage of simple abscess and also in vital areas. Apart from this, non-invasive method of drainage of abscess is also been gifted. So the incision advised by Acharya Sushrut are relevant and have very much importance in current scenario. Acharya sushrut has mentioned every possible condition of abscess and its management technique. Thus, the guidelines for incision in abscess by Acharya sushrut surpasses all the aspects of abscess drainage.

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