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## A STUDY OF COMPREHENSIVE AYURVEDIC POST - OPERATIVE MANAGEMENT OF INGUINAL HERNIA

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#### Abstract:

Comprehensive Post Operative Management with the Ayurvedic medications is one of the foremost areas of research. In many research centers diverse medications were used in the management of different post operative wounds, where in classics it isdescribed as Sadhyo Vrana & in our research centre many drugs were tried. Few of them like Triphala Guggulu, Gandhaka Rasayana, Asanadi qwaatha & Bala taila maatra basti were used either for pain management or wound healing and proved to be efficacious in the management of different post operative conditions. In the present study Comprehensive Post Operative Management in Inguinal Hernia is carried out using above said drugs & compared with the group of patients treated with contemporary methods using Antibiotics & Analgesics.

It is a single blind clinical study, where in 20 patients were selected for the study from SDM Ayurveda Hospital, Udupi and divided into two groups of ten patients each control group patients were treated with Inj Gentamicin 40mg IV BD & Inj Diclofenac sodium sulphate 1 amp IM SOS & in trial group patients were treated with Triphala Guggulu 450 mg 1 tid, Gandhaka Rasayana 250 mg 1 tid, Asanadi qwaatha 40 ml BD & Bala taila maatra basti 40 ml OD & the results were analyzed based on the proforma specially prepared for the study.

The present study, comprehensive Ayurvedic post operative management shows a better wound healing, early recovery & shows satisfactory pain relief in the patients operated for inguinal hernia. A trial of these techniques in larger number of patients with varied groups of patients can establish a universally accepted Ayurvedic post operative management.

Keywords: 'Post operative wound healing' 'Sadhyo Vrana' 'Triphala guggulu, Gandhaka Rasayana, Asanadi qwaatha, Bala tailamaatra basti.' 'Gentamicin, Diclofenac sodium'

#### INTORODUCTION

The response of living tissue to injury forms the groundwork of all surgical practice. Indeed, tissue injury & its sequel constitutes majority of general medical problems. Better wound healing with least scar formation and effective pain managementare the principle motto of every surgeon.

Ideal healing means different things to different surgical specialists. A general surgeon wishes for a strongly healed laparotomy wound with no intra abdominal adhesions or bowel stricture, An orthopedic surgeon wishes for a strong bone union & a plastic surgeon desires a strong but invisible scar. Further, the patient wishes speedy & painless healing. None of these ideal situations have been fully achieved.

Tissue loss or damage causes either restoration or repair by scar tissue. Few amphibians can regenerate amputated appendages but in case of mammals almost no organ regeneration except for bone and liver. The amount of tissue injury and contamination influences the speed and quality of wound healing.

Although healing is a normal body response to any type of trauma or injury, it is very much essential to take care of the injured site. Many ways like preventing the wound from infections, enhancing the body response towards the healing process may hold for the better outcome of the suffering. In particular of surgical wounds of post operative case is still essential to give importance towards these factors.

Every patient prefers to have least painful & fast recovery with no complications. A 100% full proof technique to reach these expectations is still not available. Technologies have made the post operative phase more comfortable & uncertainty results are reduced to insignificant results. Still there is compass for improvement.

An Ayurvedic management may give a new window to develop a safer & dependable post operative management. So there is need to establish an ayurvedic effective post operative management. Sushruta has used various techniques & approach to achieve this. Planning a cost effective, reliable and simple management is the need of the day.

#### **Objective:**

- To evaluate the efficacy of Triphala guggulu, Gandhaka rasayana, Asanaadi kwatha and Bala 1) taila matra basti in the comprehensive post- operative management of Inguinal Hernia.
- To compare the results with the control group treated with Antibiotics and Analgesics. 2) **METHODOLOGY**

#### **Source of Data:**

Minimum of 20 patients who underwent elective surgery for Inguinal Hernia

#### **Method of Collection of Data:**

Patients of either sex who underwent elective surgery for Inguinal hernia were randomly selected and divided in 2 groups i.e. Control and Trial.

#### In control group:

Inj. Diclofenac sodium 75mg/3ml IM sos.

Inj. Gentamicin 40mg IV b.d. (1<sup>st</sup> dose ½ hour before operative) was administered for 4 days.

#### In trial group:

Tab Triphala guggulu 450mg t.d.s., Tab Gandhaka rasayana 250mg t.d.s, Asanaadi kwatha 40ml b.d.

Bala taila matra basti i.e. 30ml once daily. Was administered for 7 days.

Patients were further evaluated on the basis of proforma prepared for study.

Observation period: 7 days

The wound healing & pain are assessed on daily basis for 1 week with aseptic precautions. The sutures were removed after establishing sufficient tensile strength of wound edges. The results were compared with control group patients treated with Antibiotics & Analgesics. Follow up of the patient were carried out after one week from the day of removal of suture.

#### **Inclusion Criteria:**

- 1. Patients who have undergone elective surgery for Inguinal Hernia (unilateral orbilateral) under local, spinal or general anesthesia.
- 2. Patients of either sex taken.
- 3. Age between 20 to 65 years.

#### **Exclusion Criteria:**

- 1. Patients suffering from systemic diseases like Diabetes mellitus, Hepatitis, Tuberculosis and HIV infections.
- 2. Emergency surgical indications.

#### **Assessment Criteria:**

The patient's response is assessed on the subjective and objective changes.

Subjective:-

Pain, Itching.

Objective:-

Tenderness, Temperature, Edema, Discharge, Bowel movements.

All the criteria were graded arbitrarily as follows:-

#### Α. Pain:

- 0 No pain.
  - 1 Patients complaints of pain only on movement.
  - 2 Pain during resting position.
  - 3 More severe pain and requires analgesics intervention.

#### B. **Tenderness:**

- 0 No Tenderness.
- 1- Tenderness on deep palpation.
- 2- Tenderness on moderate pressure.

3- Tenderness only on touch.

#### C. Discharge:

0 - No Discharge:-

1 – One layer of gauze is wet.

2 – Dressing has changed more than once a day.

D. **Body Temperature:** In Fahrenheit's

Ε. **Itching:** 1-Present, 0-Absent.

F. **Edema:** 1-Present, 0-Absent.

G. **Bowel movements:** 1- Discomfort evacuation, 0- comfortable evacuation.

#### **Observations & Results:**

All statistical analysis of this study is done using sigma stat version 3.1

of Humaniti

#### Pain:

| Group   | BT -AT | Difference       | SD    | t value | P value |
|---------|--------|------------------|-------|---------|---------|
| Trial   | 2.300  | 0.100            | 0.846 | 0.091   | 0.929   |
|         | 10,    | 1000             |       | 17      |         |
| Control | 2.400  | And the state of | 0.914 | 1 2     | \       |
| Se      | N R    | 4.               |       | 31 3    | . \     |

The difference in the mean values of the two groups is not great enough to rejectpossibility that the difference is due to random sampling variability. There is not a statistically significance difference between the groups.

The difference in pain after treatment in trial group was 2.300 & in control group was 2.400. P value = 0.929 the variation is not statistically significant.

#### **Tenderness:**

| Group   | BT -AT | Difference | SD    | t value | P value |
|---------|--------|------------|-------|---------|---------|
| Trial   | 2.600  | 0.600      | 0.926 | 0.219   | 0.830   |
| Control | 2.000  |            | 0.772 |         |         |

The difference in the mean values of the two groups is not great enough to rejectpossibility that the difference is due to random sampling variability. There is not a statistically significance difference between the groups.

The difference in tenderness after treatment in trial group was 2.600 & in control group was 2.000. P value = 0.830the variation is not statistically significant.

#### **DURING POST OPERATIVE PERIOD:**

2 patients were administered with Mrutyunjaya rasa and Amrutarista as stat dose in trail group due to rise in temperature.

#### NUMBER OF PATIENTS NEEDED ANALGESIATABLE NO 19

| GROUP   | NO OF PATIENT |  |  |
|---------|---------------|--|--|
| CONTROL | 9             |  |  |
| TRIAL   | 3             |  |  |

These patients were administered with Inj Diclofenac Sodium 75 mg IM on 1st Post Operative day.

#### **DISCHARGE:**

On the 1<sup>st</sup> day 3 patients recorded with wet dressing.

On the 3<sup>rd</sup> day all patients were recorded with one piece of gauze wet.

#### **ITCHING:**

In trial group 1 patient & in control 1 patient recorded with itching.

#### **EDEMA:**

In trial group 3 number of patients recorded with edema & in control group 1 patient recorded with edema.

### **BOWEL MOVEMENTS:**

In trial group all 10 patients were recorded with easy & comfortable bowel evacuations n 2<sup>nd</sup> day of surgery. Maatra basti have facilitated this.

In control group 8 patients were recorded with difficulty & discomfort in bowelevacuations even on 2<sup>nd</sup> day after surgery.

## **SEPTIC COMPLICATION:**

In trial group 2 patients were recorded with septic complications & Antibiotics weregiven.

In control group 1 patient had presented with septic complication.

#### **DISCUSSION:**

#### Pain:

Intensity of pain in control and trial groups, the variation is not statistically significant. In trial group 3 patients required analgesics due to intolerable pain inspite of giving matra basti on the 1<sup>st</sup> post-operative day. Only 1 patient required analgesicon 2<sup>nd</sup> day of post op period. From 3<sup>rd</sup> day onwards, no patients required.

Established analgesic like Diclofenac sodium sulphate & Bala taila matra basti show comparable results hence Bala taila matra basti can be used as an alternative to Diclofenac as an analgesic.

#### **Tenderness:**

Observation of tenderness is almost identical in both the groups.

#### **Temperature:**

In trail group 2 patients recorded with rise in temperature. In control group 1 patient recorded with rise in temperature.

#### Discharge:

On the 1st day 3 patients recorded with wet dressing.

On the 3rd day all patients were recorded with one piece of gauze wet.

#### Edema:

In trial group 3 numbers of patients recorded with edema. In control group 1 patient recorded with edema.

#### **Itching:**

In trial group 1 patient recorded with itching.

In control group 1 patient recorded with itching.

#### PROBABLE ACTION OF TRIPHALA GUGGULU.

Chakradatta while explaining the properties of Triphala Guggulu denotes that, it reduces kleda, paaka, putigandha, shotha along with remarkable reduction of pain in vranas.

#### PROBABLE ACTION OF GANDHAKA RASAAYANA.

Katu, tikta rasa present in Gandhaka Rasayana helps in vranavasadana, thus helping inearly wound healing and significant reduction in the pain and it is also a rasayana.

#### PROBABLE ACTION OF ASANADI KWAATHA.

Most of the drugs in Asanadi qwaatha are having sheetha veerya. Drugs like triphala which are vrana ropana in nature. Most of the drugs have tiktha, kashaaya rasa, laghu guna & katu vipaaka, kaphagna & medogna. The excess of kleda which is present in the body can create opportunity for the infection. Asanaadi qwaatha due to above said properties it promotes in the wound healing.

#### PROBABLE ACTION OF BALA TAILA MAATRA BASTI.

Pain is produced due to Vata dosha & management of pain should consider regulation of Vata.

Sneha Dravya has Drava, Sara, Snigdha, Picchila, Guru, Sheeta, Mrudhu and Manda Guna predominantly. Here the properties of bala taila, controlling the aggravated VataDosha and provide Brahmana karma.

## **Conclusion:**

Inguinal hernia is common surgical disorder in the Shalya tantra department and effective

comprehensive ayurvedic postoperative management is to be established.

Various studies done earlier have suggested the utility of Triphala guggulu, Gandhaka rasayana, Asanadi kwatha in better wound healing. The post operative pain management has to be reinforced by some additional techniques. Bala taila maatra basti is tried considering the vata shamaka property of basti.

The present study, comprehensive Ayurvedic management shows a better wound healing & early recovery & shows satisfactory pain relief in the patients operated for inguinal hernia.

A trial of these techniques in larger number of patients with varied groups can establish a universally accepted Ayurvedic post operative management.

#### **References:**

- 1. Dwivedi kapiladeva, Vedo Me Ayurveda, Jnanapur, Vishwabharati Anusandhana Parishad, Pp 175:296
- 2. Internet ref, Jatakamala, A garland of birth stories http://dogbert.abcbook.com
- 3. Sushruta, Acharya Jadavaji Trikamji, Sushrutha samhita, Ed 9th, Varanasi Choukambha Orientalia, 2007, Pp824: 396.
- 4. Charaka, Acharya Jadhavaji Trikamji, Charaka Samhita, Ed. 5, Varanasi Chowkhambha Publications, 2001 Pp 738:592
- 5. Vagbhata, Kaviraja Atrideva Guptha, Asthanga Samgraha, vol 2, Varanasi, Krishnadas academy 1993, Pp:436:295
- 6. David C Sabiston, Sabiston's text book of surgery, Ed 14, HBG pheladelphia, International, 1991, pp2208:164
- 7. Charaka, Acharya Jadhavaji Trikamji, Charaka Samhita, Ed. 5, Varanasi Chowkhambha Publications, 2001 Pp 738:595
- 8. Sushruta, Acharya Jadavaji Trikamji, Sushrutha samhita, Ed 9th, Varanasi Choukambha Orientalia, 2007, Pp824: 108.
- 9. Dr. Anna Moreshwara Kunte, Vagbhata, Asthangahridayam, Ed 9<sup>th</sup> Varanasi, Choukamba orientalia, 2002, Pp 956:865.
- 10. P.V.Sharma, Dravya Guna Vignana vol. 2, Varanasi, Chaukhambha Vishva Bharathi Academy, 2003, Pp 873:275
- 11. Sri Bhavamisra, Sri Brahmasankara, Bhavaprakasha nighantu, 1st part, Varanasi, Chaukhambha Samskrit Samsthana, 2002, Pp.959:779.
- 12. Sri Prayagadatta Sharma, Sri Sharangadharacharya, Sharangadhara Samhitha, Varanasi, Choukambha Amarabharati Prakashana, 1988, Pp556:210
- 13. Siddinandan mishra, Ayurvedeeya Rasa shaastra, Varanasi, Chaukamba Orientalia, 2001, Pp 610:348.