



**Research Article**

**STILL THE CONCEPT OF SUSHRUTA IS ALIVE- A CASE REPORT OF SURVIVAL OF THE PATIENT AS PER SUSHRUTA'S PRINCIPLE EVEN THOUGH INTESTINAL PERFORATION FOLLOWED BY FECAL FISTULA FORMATION**

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**ABSTRACT**

Acharya Sushruta has described the ancient tradition of surgery in Sushruta Samhita. It contains detailed description regarding practice of surgery. He performed surgeries in ancient era when no specific diagnostic facilities were available; therefore Sushruta Samhita is considered as the landmark in the field of surgery. In this review an attempt has been made to highlight the ancient surgical concepts of Sushruta Samhita which are being practiced even today with same basic principles but after some modifications and amendments. Among all the principles described by him, one very significant principle is that if in a patient, any viscera or organ is perforated but his/her fecal matter, urine and flatus are passed from its natural path so in spite of occurrence of related complications, the patient will survive.

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**INTRODUCTION**

Ayurveda is a comprehensive scientific system of medicine developed through ancient wisdom, clinical experiences and experimentations. Ayurveda has a unique speciality in the field of Shalya Tantra in which Acharya Sushruta explained the most sophisticated principles of surgery as well as conservative management of different specific diseases. Initially two disciplines described in Ayurveda, one is Atreya Sampradaya dealing with Physicians (Kayachikitsa) while another is Dhanvantari Sampradaya dealing with Surgeons (Shalya Chikitsa). In ancient time, Acharya Sushruta laid concepts and basic fundamentals of Surgery which are still alive today as such or in modified forms for example – Principles regarding Sandhana Karma (Reconstructive surgery), Bandhan Karma (bandaging), Siwan Karma (suturing), Vranopkrama (Wound management), Asthi sandhan (Fracture management), Agnikarma (Therapeutic thermo cautery), Kshar Karma (chemical Cauterisation), Udarpatan (Laparotomy) etc.

Acharya Sushruta elaborated that if a person suffers from perforation of any hollow viscera either may be due to traumatic or iatrogenic causes, and his/her excretas such as fecal matter, flatus and urine are passing through natural pathway, then patient may survive .....

This principles of management indicate the glory of Ayurveda in past. This observation comes after observation of good number of cases related to such complication.

In recent time, we come across many cases of fecal fistula, biliary fistula and urinary fistula, if there distal passage is clear and whatever it carry, passes through natural route, then the chances of the survival of the patient increases to lot many extent on the basis of Sushruta's concept, and fistula heals automatically in due course of time. If a patient suffering from such type of complication, surgeon allways in dilemma, regarding surgical intervention, because the mortality rate is increases in such a morbid cases if we try to reoperate. But on the fundamental principles of Sushruta we can wait and manage patient conservatively if such clinical finding present. Chidraodara, as described in Ayurvedic texts, could be correlated with intestinal perforation. On focusing over the pathophysiology it's found that the microbiology of the small bowel changes from its proximal to its distal part. Few bacteria populate in the proximal part of the small bowel, whereas the distal part of the small bowel (Jejunum & Ileum) contains aerobic organisms such as *E. Coli* and a higher percentage of anaerobic organism such as *Bacteroides fragilis*, thus the likelihood of intra-abdominal infection is increased with perforation of the distal bowel.

The presence of bacteria in the peritoneal cavity stimulates an influx of acute inflammatory cells. The Omentum & viscera tend to localize the site of inflammation, producing a phlegmon. The resulting Hypoxia in that area facilitates

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growth of anaerobes and produces impairment of bactericidal activity of granulocyte, degradation of cells, hypertonicity of fluid forming the abscess which finally leads to perforation, resulting into bacteremia, generalised sepsis, multiorgan failure and shock may occur. In such condition if distal passage is not clear and patient not passes his/her natural urge, it leads to toxemia and may be fatal. Early recognition and control of sepsis, management of fluid and electrolyte imbalance, meticulous wound care and nutritional support appear to reduce the mortality rate, and allow spontaneous fistula closure in some patients. Fistula formation can result in a number of serious or debilitating complications, ranging from disturbance of fluid and electrolyte balance to sepsis even death.

**Case Study**

A 35 year male patient, residing district Ballia, Uttar Pradesh, came to the Shalya OPD, S. S. Hospital, IMS, BHU, Varanasi with complain of unable to pass flatus and stool( Obstipation) from last 7 days, Pain and Distention of abdomen from last 4-5 days, bring on strature. After taking proper history with physical and local examination, patient diagnosed as a case of Intestinal Perforation on the basis plain X –ray in erect posture indicating free gas under right dome of diaphragm. Patient was admitted in the male Sushruta ward, SIR SUNDAR LAL HOSPITAL, IMS BHU with MRD NO. 1503175 at 22.09.2017.

**Clinical Features**

On examination of the patient, his general condition was poor .Abdominal distention and Tenderness present all over abdomen. He also suffers from Breathlessness and not able to talk properly.

**Past History**

No any relevant past history present.

**Drug History**

Not specific.

**Investigations**

**Hematological- During management**

	(22/09/2017)	(02/10/2017)	(04/10/2017)
Hb(gm/dl)	11.2	9.1	8.8
TLC (/ul)	6370	10900	9770
	N:-56.3 M:-14.9	N:-70.3 M:-7.4	N:-70.3 M:-6.4
DLC(%)	L:- 28.4	L:-21.2	L:-21.6
	E:-0.3 B:-0.2	E:-0.6 B:-0.1	E:-1.6 B:-0.1
ESR(1 <sup>st</sup> hrs)	21	29	18
PLT(×10 <sup>3</sup> /ul)	209	445	552

HIV Non-reactive  
HBsAg Non-reactive

**FBS (06/09/2017)** - 86.0mg/dl  
**RBS (22/09/2017)** – 104.0 mg/dl  
**X-Ray chest PA (24/09/2017)** –

Gases under the right dome of the diaphragm  
Broncho-vescicular markings are prominent

Cardiac shadow – WNL

**ECG ( 22/09/2017)-** 0.1 mV ST elevation in four leads .  
Not necessarily pathological

**RFT**

	22/09/2017	24/09/2017	10/10/2017
Na	141.8 mmol/l	146.9mmol/l	131.0mmol/l
K	3.28 mmol/l	4.87mmol/l	4.92mmol/l
Cl	110.2 mmol/l	106.6mmol/l	96.5mmol/l
B Urea	28.0 mg/dl	70.0mg/dl	15.0mg/dl
Sr Creatinine	0.8mg/dl	0.8mg/dl	0.5mg/dl

  

<b>LFT</b>	22/09/2017	24/09/2017	01/10/2017
SGPT/ALT	40.0 U/l	24.0U/l	14.0U/l
SGOT/AST	67.0U/l	34.0U/l	30.0U/l
Bil (T)	1.8mg/dl	1.1mg/dl	0.6mg/dl
Bil (D)	0.9mg/dl	0.7mg/dl	0.3mg/dl
Total Protein	6.4g/dl	4.1g/dl	5.2g/dl
Albumin	2.9g/dl	1.8g/dl	2.1g/dl
ALP	206.0 U/l	201.0U/l	206.0U/l

Ryle’s Tube insertion and catheterisation was done. After doing routine investigations and viral markers, under general anaesthesia, exploratory Laparotomy followed by closure of terminal ileal perforation and placement of Omental patch over closure site and toileting of peritoneal cavity with normal saline done on 23/09/2017. Two drains were placed, one in Pelvic cavity and another in right lateral upper side of abdominal cavity. Patient was kept on multi-paramonitor, oxygen inhalation and one unit Blood transfusion done on 23/09/2017 after surgery along with all life saving drugs.

Initially, general condition of patient was good and improving daily and dressing done on 3<sup>rd</sup> day (25/09/2017) and 7<sup>th</sup> day (29/09/2017). Patient was allowed to take sips (by mouth) on 9<sup>th</sup> day (01/10/2017). His general conditions were also improved, but on 11<sup>th</sup> day (03/10/2017), mild collection as well as fluctuation present below stitch line and when two stitches were removed, gases as well as faecal matter with liquid content passed freely from opening which indicates faecal fistula formation , but Patient passes flatus, urine as well as stool regularly. So, we put the patient for the conservative management on the principles of Sushruta.

Daily dressing of the patient was done. Gradually, the faecal matter decreases in amount day by day and on 19<sup>th</sup> day (11/10/2017) it stops but only mild pus discharge came from it. We send the pus for culture and sensitivity, E coli organism detected and it was markedly sensitive to Gentamicin.

So we put the patient on Injection Gentamicin 80 mg I.V., 12 hourly, for 7 days. The amount of pus decreases gradually and patient responded well as his general conditions were also improves. During this period we also advised the patient to take rich protein diet and mutton soup (Mamsa rasa described in Ayurveda) daily. Wound was gradually healed and patient discharged on 20/10/2017.

**DISCUSSION**

Ancient surgical science – Shalya Tantra embraces all processes aiming at the removal of factors responsible for producing pain or misery to the body or mind. Acharya Sushruta took Surgery in medieval India to admirable heights and that era was later regarded ‘The Golden Age of Surgery’ in Ancient India. In this review an attempt has been made to highlight the ancient concepts of Susruta Samhita, which we are practicing today with more or little modifications. With advancement of technology, use of specific antibiotics as well as various life saving drugs during and after surgery, even

though the fundamental principles of surgery whatever proposed by Acharya Sushruta thousands year back is still practical and we can manage and save the patient's life even though in morbid conditions.

### Recommendations

The present study is about the presentation of single case only. Furthermore well structured standardized randomized controlled study is recommended.

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