

**“THE CLINICAL STUDY OF OCCURRENCE OF POSTOPERATIVE
SEPSIS AFTER EMERGENCY ABDOMINAL SURGERIES”**

A DISSERTATION SUBMITTED TO THE TAMILNADU

DR MGR MEDICAL UNIVERSITY

CHENNAI

In partial fulfillment of the requirement for the degree of

M.S. (GENERAL SURGERY)

BRANCH – I

Register No: 221711361



DEPARTMENT OF GENERAL SURGERY

TIRUNELVELI MEDICAL COLLEGE

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DECLARATION

I solemnly declare that the dissertation titled “**THE CLINICAL STUDY OF OCCURRENCE OF POSTOPERATIVE SEPSIS AFTER EMERGENCY ABDOMINAL SURGERIES**” is done by me at Tirunelveli Medical College hospital, Tirunelveli. I also declare that this bonafide work or a part of this work was not submitted by me or any others for any award, degree, or diploma to any other University, Board, either in or abroad. The dissertation is submitted to The Tamilnadu Dr. M.G.R. Medical University towards the partial fulfilment of requirements for the award of M.S. Degree (Branch I) in General Surgery.

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PROTOCOL TITLE: A CLINICAL STUDY OF OCCURRENCE OF POST OPERATIVE SEPSIS AFTER EMERGENCY ABDOMINAL SURGERIES IN TIRUNELVELI MEDICAL COLLEGE

PRINCIPAL INVESTIGATOR: Dr.P.PARAMAGURU, MBBS.,

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Dear Dr.P.PARAMAGURU, MBBS, The Tirunelveli Medical College Institutional Ethics Committee (TIREC) reviewed and discussed your application during The IEC meeting held on 27.10.2017.


THE FOLLOWING DOCUMENTS WERE REVIEWED AND APPROVED

1. TIREC Application Form
2. Study Protocol
3. Department Research Committee Approval
4. Patient Information Document and Consent Form in English and Vernacular Language
5. Investigator's Brochure
6. Proposed Methods for Patient Accrual Proposed
7. Curriculum Vitae of The Principal Investigator
8. Insurance /Compensation Policy
9. Investigator's Agreement with Sponsor
10. Investigator's Undertaking
11. DCGI/DGFT approval
12. Clinical Trial Agreement (CTA)
13. Memorandum of Understanding (MOU)/Material Transfer Agreement (MTA)
14. Clinical Trials Registry-India (CTRI) Registration

THE PROTOCOL IS APPROVED IN ITS PRESENTED FORM ON THE FOLLOWING CONDITIONS

1. The approval is valid for a period of 2 year/s or duration of project whichever is later
2. The date of commencement of study should be informed
3. A written request should be submitted 3weeks before for renewal / extension of the validity
4. An annual status report should be submitted.
5. The TIREC will monitor The study
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 - b. The PI must comment how proposed amendment will affect the ongoing trial. Alteration in the budgetary status, staff requirement should be clearly indicated and The revised budget form should be submitted.
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INTRODUCTION

Postoperative sepsis represents one of the most frustrating and difficult occurrences experienced by surgeons in the postoperative period and it remains a significant cause of morbidity and mortality following emergency abdominal surgeries. It increases the cost of treatment and is associated with lost work productivity, disruption of normal life and unanticipated stress to patients in general. Although preoperative predictive factors are well recognized, early recognition of postoperative sepsis remains problematic. The complex deregulated host response to infection includes uncontrolled inflammation and immune suppression. At its most basic level overt clinical infection represents a shift of balance of forces comprising defense and microbial invasion. Over the time, the virulence of infection, amount of microbial inoculum, and host defence has occupied the interests of surgeons in their fight against infection.

Numerous studies have evaluated postoperative sepsis, but because of the complexity of the problem, some reports have limitations which prevent meaningful interpretation. Some overlook the necessity of rigorous statistical control to discriminate between the random effects of chance and relevant clinical factors determining the incidence of postoperative sepsis. Other reports bulk together

widely diversified surgical experience so that conclusions in regard to sepsis rates may be confounded by alterations in the case material from time to time. Such changes will affect calculated sepsis rates by the inclusion of various cases in different periods with greater or lesser propensities to develop postoperative sepsis. Commonly a precise definition of surgical sepsis or the details as to the methods employed with appropriate checks are omitted. The low incidence of postoperative sepsis following clean surgery, in the order of one to five per cent, requires that many cases be collected to permit meaningful interpretation of the statistics. The complex interdependence of the factors contributing to the development of postoperative sepsis makes it extremely difficult to extract any one factor as the critical one among several hundred that could be responsible for a change in the incidence. These basic problems are difficult to resolve in the analysis of results, and although the present study has its own shortcomings, the incidence of postoperative sepsis has been studied in the patients who underwent emergency abdominal surgeries.

AIMS AND OBJECTIVES

To determine the occurrence of postoperative sepsis after emergency abdominal surgeries in all units in Tirunelveli medical college hospital during the period between October 2017 to August 2019 and to determine the various factors which predisposes to postoperative sepsis during preoperative, intraoperative and postoperative period and to determine the microbiology of infection and to determine the mortality of sepsis.

REVIEW OF LITERATURE

Sepsis is the combination of infection and its physiological changes occurs in the body. this entire process is collectively called as systemic inflammatory response syndrome. this is the common causes for increasing in the mortality and morbidity.

SYSTEMIC INFLAMMATORY RESPONSE SYNDROME

- Body temperature of about more than 38.5C or less than 35.0C
- Heart rate must be more than 90/min
- Respiratory rate must be more than 20/min orPCO₂ must be less than 32mmHg
- WBC>12,000/cu mm or less than 4000 or more than 10%immature forms

At least two criteria must be present in the patient for SIRS

SEPSIS

Sepsis is the SIRS plus evidence of any infective foci like positive blood or urine or sputum culture or infection by any ruptured bowel or wound with purulent discharge

SEVERE SEPSIS

Severe sepsis is defined as sepsis plus any one of signs of organ dysfunction like

- Urine output of less than0.5ml/kg
- Level of lactic acid must be more than 2mmol/l

- Abnormal EEG or change in mental condition
- Platelet count of less than 100000/ml or presence of DIC
- Presence of acute lung injury or ARDS
- Presence of cardiac dysfunction

SEPTIC SHOCK

Septic shock is defined as severe sepsis plus one of the criteria

- Mean blood pressure of less than 60mmHg or pulmonary capillary wedge pressure must be between 12 to 20 mmHg
- Any need of inotropes supports like dopamine or norepinephrine or epinephrine

RELEVANT ANATOMY

The largest and most complex serous membrane in the abdominal cavity is the peritoneum. Inside the abdominal cavity, anteriorly and laterally it lines the inner surface of the abdominal wall, posteriorly it forms the boundary for the retroperitoneum, inferiorly it covers the structures in the pelvis and superiorly it covers the inner surface of the diaphragm. The layer of peritoneal reflections in the abdominal organs forms the visceral peritoneum. It consists of mesothelial cells and loose areolar tissues.

The vascular network and capillaries, nerve fibres and lymphocytes and macrophages are present in the areolar tissue. The cells in the peritoneum form a complex network which helps in the movement of fluids and solutes.

The normal level of peritoneal fluid is around 50ml every day only a small amount of fluid is transferred across the area. This fluid is a part of plasma which has similar concentrations of solutes and electrolytes with interstitial space. albumin is the protein content which is less than 30g/l. the fluid also contains various immune cells like macrophages and lymphocytes. The mesenteric attachments and retro peritonealisation of certain organs divides the peritoneal cavity into compartments.

ETIOLOGY

SEPSIS IS DETERMINANT BY THREE MAJOR FACTORS

- 1.The microbes which causing the infection.
- 2.The local environment which predispose to sepsis.
- 3.The host factors which causes defence mechanism.

A Complete dynamic interaction takes place between these three factors.

MICROBIOLOGY OF PATHOGENESIS IN SURGICAL INFECTIONS

There are various numbers and types of bacteria that predisposed to septicaemia in surgical patients.

It is necessary to identify that most of the infections that occurs in post-operative patients are due to endogenous microbes. Certain microbes are present in the particular areas in the body and that particular anatomical exposure at that area during the surgery are the main cause of infection. It is important to understand the normal micro-organisms present in the body which is helpful in using prophylactic antibiotic and helps in initiating the empirical antibiotic therapy.

GRAM POSITIVE COCCI

Most Important Cocci are Staphylococci and Streptococci.

STAPHYLOCOCCI

Coagulase positive and coagulase negative are the two important strains of staphylococci.

Among these two-coagulase positive staph aureus is the most important microbes involved in post-operative infection.

These organisms are mainly resistant to penicillin group of drugs and they are sensitive to penicillinase resistant antibiotics and there is difficulty in treating the cases.

For the past twenty years the methicillin resistant staph aureus is found to be increase in number.

Vancomycin, Quinupristin/Dalfopristin, Daptomycin, Linezolid are the drugs helps in treating MRSA.

STREPTOCOCCI

Another common organism involved are streptococci

Among these Beta haemolytic streptococci, S. Pneumonia and alpha haemolytic streptococci are the common organisms causing sepsis.

ENTEROCOCCI

These are commonly mixed floral micro-organisms involved in intra-abdominal infections.

Gentamycin combined with vancomycin or ampicillin are the most effective combination of antibiotics used.

Grave Prognosis can be expected if there is uncontrolled infection with enterococci.

AEROBIC AND FACULATIVE GRAM NEGATIVE RODS

Most commonly Enterobacteriaceae are involved like Escherichia, Proteus and Klebsiella.

These are the most common cause of hospital acquired infections and post-operative surgical infections and post-operative sepsis.

Extended Spectrum Penicillin, aminoglycosides and quinolones Third generation Cephalosporin are the drugs used in Empirical antibiotic therapy for these infections.

OBLIGATE AEROBIC GRAM-NEGATIVE RODS

Most common are Pseudomonas and Acinetobacter.

These are found in hospital acquired Pneumonia.

These are present in the Peritoneal Cavity

These are mainly Antibiotic resistant.

Specific antipseudomonal antibiotics are needed for these cases.

ANAEROBES

- 1) These are the normal inhabitants present in gastro intestinal tracts.
- 2) Bacteroides fragilis is the most common organism.
- 3) Clindamycin and combination of penicillin and beta lactamase inhibitor, Metronidazole are the most effective antibiotics used for anaerobes.

ANTIMICROBIALS

The main aim of antimicrobial therapy is to maintain adequate antibiotic level at the infection site.

EMPIRICAL TREATMENT GUIDELINES

The antibiotic must cover the presumed pathogens

Must avoid anti-anaerobic antibiotics

The drug must reach the site of infection.

Toxicity have to be monitored.

Time bound regimens must be used.

LOCAL FACTORS [MICRO-ENVIRONMENT]

Hematoma

Tissue pH levels

Drains

Non-Viable debris

Oxygen Tension and Perfusion

Seroma

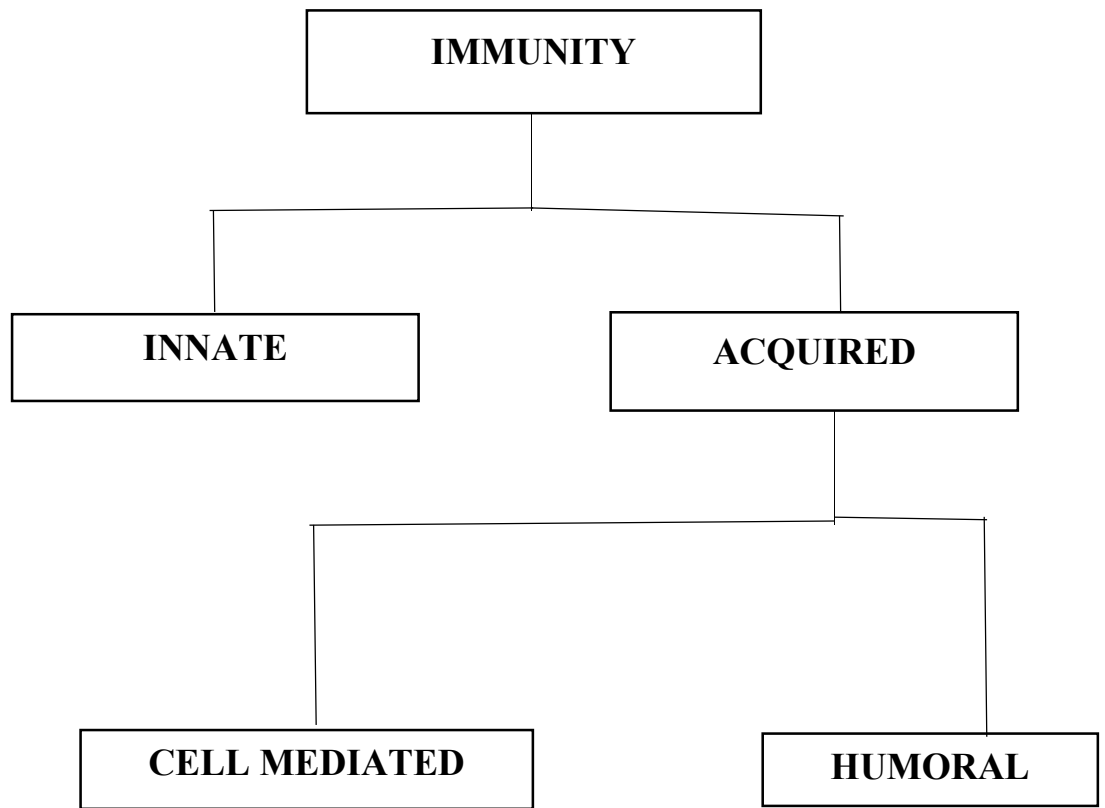
Foreign body (e.g. prostheses)

Suture material contamination with exogenous bacteria.

HOST DEFENCES MECHANISM

The mechanism present in the human body resist against any types of infections and toxins is called IMMUNITY. Two types of immunity are

1. Innate Immunity
2. Acquired Immunity
 - i. Cell mediated immunity
 - ii. Humoral immunity



INNATE IMMUNITY

This type is non -specific in nature

Components of innate immunity are

Phagocytosis process takes place by the actions WBCs and macrophages.

Digestive Enzymes and Acid Secretion in GI system.

Natural Barriers like Skin

Blood Chemical Components like Complements, NK cells, Lysozymes and Polypeptides.

ACQUIRED IMMUNITY

This is Specific in nature. It is of two types namely cell mediated and humoral immunity.

CELL MEDIATED IMMUNITY

Activation of T Lymphocytes in Lymph nodes takes place in cell mediated immunity.

T cells are FOUR in numbers

1. Helper T Cells
2. Cytotoxic T Cells
3. Suppressor T Cells
4. Memory T Cells

HUMORAL IMMUNITY

Antibody formation takes place here

B Cells Lymphocytes plays a major role

It is of FIVE classes

1. IgM
2. IgG
3. IgE
4. IgA
5. IgD

COMPLEMENT SYSTEM

These are the system of 20 different proteins plays a major role in the defence process in the body.

The Principle Factors are 11 Proteins which are named C1 to C9, B and D.

These are all present in the Blood.

Classical pathway and Alternative pathways are the two pathways.

HOST FACTORS

- ❖ Age
- ❖ Obesity
- ❖ Diabetes
- ❖ Steroids and Immunosuppressants
- ❖ Malnutrition
- ❖ Transfusion
- ❖ Multiple Comorbid Conditions
- ❖ Smoking

PATHOGENESIS

The breaching of skin by the surgical incision is the initial act that disturbs the primary barrier to the infection. Microbes enter through the incision into the body cavity any tissue necrosis or ischemic changes or poor blood flow which predisposes to haematoma and exudate formation which increases the risk of ssi. These provide the suitable medium for the growth and proliferation of microbes if there is poor haemostasis, the risk of septicaemia gets increased. Presence of foreign body predisposes to risk of infection as it reduces the number of organisms because the inoculum size varies with the presence of foreign body. Staple closure predisposes to a smaller number of organisms to produce infection when compared to tape closure of wound. Staple closure needs large inoculum when compared to suture closure. The risk of infection also depends on the type

of suture material used. Large inoculum is needed in monofilament materials when compared to non-synthetic materials. Implants like bone wax prosthesis also increases the risk of infection.

Besides these, surgeon's skill and experience also affect the rate of sepsis formation. Long duration of surgery and tissue trauma are the other contributing factors for infection.

CLASSIFICATION OF WOUNDS

CLEAN/CLASS I

Clean wounds are non-traumatic, elective, non-emergency in condition which are primarily closed. There is no acute inflammation. there is no break in technique. there is no entry of respiratory, GIT and genitourinary tracts.

CLEAN CONTAMINATED/CLASS II

These are present in urgent or emergency cases. there is minor break in the technique. There is elective opening of respiratory, gastrointestinal, biliary and genitourinary tracts. Minimum spillage occurs in this condition with out encountering infected bile or urine (e.g. appendicectomy)

CONTAMINATED/CLASS III

In this gross spillage from gastrointestinal tract, genitourinary and biliary tract takes place with infected urine or bile. wide range of break in technique. Nature of inflammation is non-purulent in nature, penetrating wounds with less than 4 hours duration

DIRTY/CLASS IV

There is perforation of genitourinary, biliary and GIT tract, purulent inflammation is present in these wounds. penetrating wounds of more than 4 hours duration belongs to this category.

SURGICAL SITE INFECTION

SUPERFICIAL INCISIONAL SSI

It must occur within 30 days of surgeries

It involves only skin and subcutaneous tissue and the patient must have one of the following criteria:

- A. Purulent Discharge from the incision which is confirmed with or without laboratory tests
- B. Microbes isolated from aseptic culture of tissue or fluid from the incision
- C. Confirmation or diagnosis by the surgeon or physician
- D. Must have at least one of the signs and symptoms of inflammation
- E. The incision must be opened by the operating surgeon

Exceptions

Episiotomy wound infection

Circumcision site in neonates

Infections in burns

Any incisional surgical site infection that extends into deeper areas

Stitch abscess

INFECTED APPENDECTOMY WOUND



DEEP INCISIONAL SSI

Incision must involve deeper soft tissues like muscle and facial layers

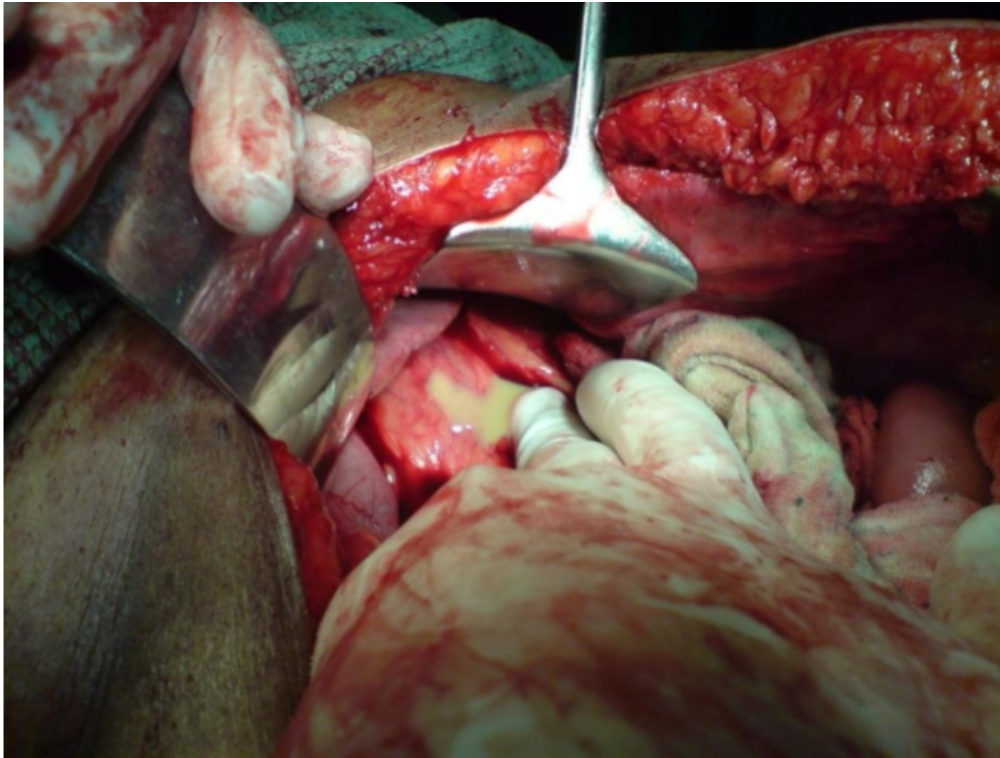
Must occur within 30 days after surgery with one of the following criteria

- Purulent discharge from the deep incision site but not from organ space

- When the patient has anyone of the features like FEVER,PAIN the incision is opened by the surgeons unless the culture is negative
- Any deep infection which is identified by direct examination or during any surgery or during histological examination or by any radiological investigations.
- Diagnosis must done by the surgeons or physician

ORGAN/SPACE SSI

- Any infection involving any region of anatomical organ within thirty days after the surgical procedure.
- Infection occurs during less than one year after any surgical procedure with any implants.
- Purulent discharge from the organ space.
- Micro-organisms obtained from the organ space fluid or tissue
- Radiological or histopathological confirmation of infection.



ASPIRATION OF PUS INTRAOPERATIVELY

RISK FACTORS FOR SSI

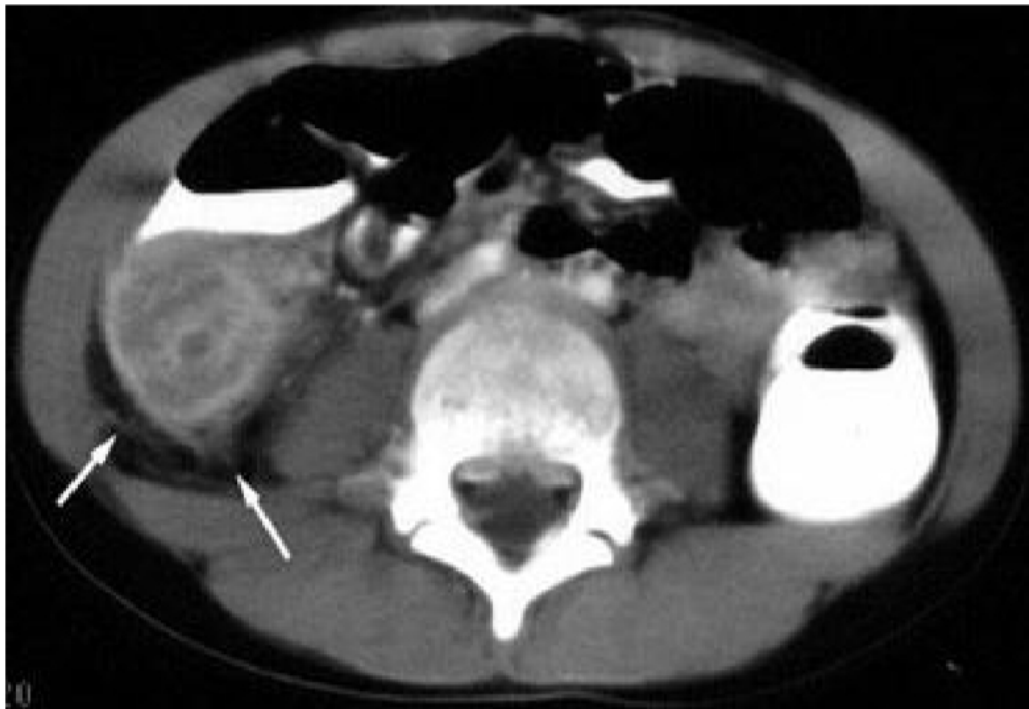
MICROBES

- Previous antimicrobial therapy
- Duration of procedure
- Any recent hospitalization
- Wound class
- Bacterial number

- Virulence of organism
- Antibiotic resistance
- Preoperative hair shaving

PATIENT FACTORS

- Any blood transfusion
- Smoking
- Age
- Obesity
- Malnutrition
- Blood sugar level
- Immunocompromised
- Any comorbid conditions
- Malignancies



INTRA ABDOMINAL ABSCESS

LOCAL FACTORS

- Drains
- Suture materials
- Haematomas
- Surgical techniques
- Foreign bodies
- Seroma
- Necrosis

POSTOPERATIVE FEVER

This is the most common clinical findings in the postoperative patients .it is the raise in body temperature of more than 38.5 degree Celsius. The body temperature is controlled by the central nervous system mainly the anterior hypothalamus. various number of conditions causes postoperative fever.

The first and foremost cause is postoperative infection. Along with hospital acquired infections like UTI, PNEUMONIA etc

ABDOMINAL COMPARTMENT SYNDROME

This syndrome mainly occurs as the complications of increased intraabdominal pressure.

CONDITIONS ASSOCIATED WITH ABDOMINAL COMPARTMENT SYNDROME

Ascites

Intestinal obstruction

Severe bowel oedema

Retroperitoneal haemorrhage

Intraabdominal haemorrhage

MECHANISM BEHIND THE SYNDROME

FIRST STEP

Initially the pressure is transmitted to lungs through pleural space which cause decreases in lung compliance.

This causes hypoventilation and V/P mismatch which causes hypercapnia and hypoxia

SECOND STEP

The combination of raised intrapleural pressure and raised abdominal pressure cause decreases in venous return.

This causes the increase in the afterload to heart chambers and compression effect to the heart

THIRD STEP

The blood supply to the abdominal organs gets decreased due to the combined effects of

1. Reduced cardiac output
2. Raised interstitial pressure
3. Raised outflow pressure

CONSEQUENCES

All these mechanisms lead to

- Reduced urine output
- Acute renal failure
- Decreased liver metabolism
- Reduced mucosal Ph
- Bacterial translocation
- Reduced abdominal wall perfusion
- Delays wound healing

All the above manifestations depends on the range of intraabdominal pressure.

- 0 to 5mmHG is the normal intraabdominal pressure.
- In case of mild increase in pressure like 10 to 15 mmHg, the cardiac output and renal respiratory symptoms are usually lesser due to intravascular compensation
- When there is moderate raise such as 15 to 25 mmHg, the symptoms start to appears but the symptoms get relieved by early resuscitation measures
- When there is severe elevation of more than 25mmHg decompression by surgical methods and fluid resuscitation and use of vasoconstriction drugs are needed

DIAGNOSIS

This syndrome usually occurs in critically ill patients. Hence it is difficult to diagnose the syndrome as it is usually associated with other conditions like respiratory failure and circulatory failure.

The intraabdominal pressure must be calculated after excluding the cardiac tamponade and respiratory condition like status asthmaticus tension pneumothorax.

CURRENT METHODS

The current methods for by indirectly measuring

- IVC pressure
- Rectal pressure
- Gastric pressure
- Bladder pressure
- Direct puncture

ACUTE WOUND DEHISCENCE

The separation of musculoaponeurotic layers in the abdomen during the postoperative period is called acute wound failure.

It is also called wound dehiscence or burst abdomen.

In 1% to 3% of patients burst abdomen occurs

It occurs mostly during the 7th and 10th pod

High incidence occurs on the seventh POD

Such cases can be diagnosed only clinically. these patients usually presented with wound discharge on the 6th or 7th POD



BURST ABDOMEN

FACTORS ASSOCIATED WITH BURST ABDOMEN

- Malnutrition
- Advanced age
- Faulty technique in facial closure
- Emergency surgery
- Radiation
- Chemotherapy
- Previous wound failure
- Obesity
- Steroid therapy
- Seroma
- Haematoma
- Infection
- Raised intraabdominal pressure
- Diabetic

This is most commonly occurs in patients undergoing emergency surgeries when compared to elective surgeries

Vertical upper abdominal incision is more prone for wound dehiscence due to certain anatomical factors

- The blood vessels run transversely in the abdominal layers and the incision interfere with it.
- There is a segmental blood supply and nerve supply for rectus abdominal muscle
- If the incision is extended laterally, the chance of denervation of medial part of rectus muscle is high. This leads to muscle atrophy. hence the chance of wound dehiscence is much higher. hence the incision must be in the midline
- In vertical incision the fibres of rectus sheath gets disturbed because the fibres runs in the transverse direction.
- The upper abdominal incision causes higher chance for respiratory complications and cough because of pain, which affects movement of chest. due to cough the intraabdominal pressure increases which causes strain the wound site
- In the skin elastic fibres are running transversely, because of vertical incision they are separated and due to that wound strength is diminished
- In Lower incision wound dehiscence is more common due to linea alba as it is a weaker structure present behind the umbilicus.

MANIFESTATIONS

The clinical manifestations of post-operative infections are there is a raise in body temperature, raise in pulse rate and respiratory rate, raise in local warmth, local edema and tenderness and collection from the drain site, the definite evidence of sepsis is purulent discharge from the wound site.

DIAGNOSIS

The diagnosis of postoperative sepsis is primarily depending on the identification and detection of infective organism. microbial culture is the first and foremost gold standard investigations of choice. The culture sample must be more than 2 samples with one or more samples must be percutaneous. In more than 48 hours blood culture from each vascular access is needed.

BIOMARKERS

The two important biomarkers for diagnosis of sepsis are C reactive protein and procalcitonin.

C REACTIVE PROTEIN

It is the acute phase reactant which is produced in liver during any infection and inflammatory condition.it is a nonspecific marker which increases in other elective surgeries, traumatic surgeries, burns and myocardial infraction. During bacterial infection its sensitivity is around 68 to 92% and specificity is around 40 to 67%. It helps in analysing the infection severity and prognosis of antimicrobial therapy.

PROCALCITONIN

It is another biomarker which increases during systemic infection and sepsis. It is the calcitonin precursors which is produced by C cells present in the thyroid gland. Its normal range is 0.05ng/ml, but increases during severe sepsis within 2 to 4 hours.

TNF alpha, IL 6, IL 8 are the inflammatory markers elevated in severe sepsis.

CT abdomen with pelvis and USG has been used for detecting any deep intraabdominal abscess collections. In CT the intraabdominal abscess are appeared as well defined lesions which are low attenuated region with obliteration of fat planes

COMPLETE BLOOD COUNT

In severe sepsis there is leucocytosis which helps in the diagnosis. There is abnormal reduction in platelet counts. There is elevation of renal function test with elevated creatine level of more than 176.8mmol. There is an increased level of PT and APTT values with abnormal coagulation profile. Random blood sugar level of more than 140 mg/dl in the absence of diabetic helps in the diagnosis of sepsis. Arterial blood gas analysis shows metabolic abnormalities like acidosis in majority of patients with septicaemia.

MANAGEMENT

Intensive critical care monitoring is needed for effective management of septicemia patients.

SOURCE CONTROL

Effective source control measures like abscess drainage, removal of infective necrotic tissues should be carried out within first six hours. drainage can be either surgically or through image guided drainage with the help of CT or USG

ANTIBIOTIC THERAPY

It must be started within the first hour of presentation of signs and symptoms. The empirical antibiotic choice is depending on the patient's comorbid condition, and clinical syndrome and tolerance. In case of severe septic shock broad spectrum antibiotic is the treatment of choice. It must be re-evaluated daily to prevent toxicity, and to lessen the resistance. In case of Pseudomonas infection and severe neutropenic patient's combination therapy is needed.

INITIAL RESUSCITATION

The initial management is stabilization of airway and breathing. The next step is assessment of hypoperfusion, to prevent secondary organ dysfunction. In the initial first 6 hours the main target must be central venous pressure must be 8 to 12 mmHg with mean arterial pressure over 65 mmHg and the urine output must be more than 0.5 ml/kg/hr and the central venous saturation must be more than 70% and the mixed saturation must be >65%.

FLUID THERAPY

The main aim is to establish tissue perfusion, maintain adequate intravascular volume, improve cardiac output and prevent further organ failure by improving oxygen delivery. Colloids or crystalloids can be used. It should be given for about 1000ml of crystalloids or colloids about 300 to 500ml over 30 minutes. During this our target CVP must be >8 mmHg.

VASOPRESSORS

The initial vasopressors used for septic shock are norepinephrine and dopamine. Epinephrine and phenylephrine are mostly not used during initial stage in septic shock. When the BP is not response to dopamine or norepinephrine, epinephrine is used as alternative agent during septic shock.

STEROIDS

When the hypotension is not controlled by fluid and vasopressors, intravenous steroids can be used to correct the hypotension. Inj hydrocortisone is the preferred steroid of choice. The dose of hydrocortisone should not exceed more than 300mg/day. Corticosteroids are contraindicated in sepsis in the absence of shock.

BLOOD TRANSFUSION

Packed cell transfusion is needed when Hb is below 7g/dl. Erythropoietin is contraindicated in treating sepsis related anemia. Platelet transfusion is needed when the platelet is below 5000/cu mm regardless if bleeding manifestation and between 5000 to 30,000 when there is risk of bleeding. Fresh frozen plasma is indicated when there is risk of bleeding.

MECHANICAL VENTILATION OFV SEPSIS INDUCED ALI

In patients with acute lung injury /ARDS the tidal volume must be maintained around 6ml/kg.to avoid extensive lung collapse ventilation must be in PEEP at end expiration. Patient must be maintained in semi recumbent position.

In minority of ALI/ARDS with mild hypoxemia, non-invasive ventilation is needed.

GLUCOSE MONIRORING

Intravenous insulin therapy is needed in severe sepsis to control hyperglycaemia; blood glucose should be maintained around 150mg/dl in critical ill patient. Every 1 to 2 hours monitoring is needed.

BICARBONATE THERAPY

Sodium bicarbonate infusion is indicated to correct persistent metabolic acidosis.

DVT PROPHYLAXIS

Low molecular weight heparin or unfractionated heparin is used as prophylaxis. mechanical devices such as compression stockings are used when there are any contraindications for heparin therapy.

PROGNOSIS

The following factors influences the prognosis

- 1)Patient underlying condition
- 2)Pathogen involved
- 3)Site of infection
- 4)Extent of infection

PREVENTIVE MEASURES

PREOPERATIVE PERIOD

- Antimicrobial prophylaxis
- Preoperative hair removal
- Preoperative warming
- Strict blood sugar control

INTRAOPERATIVE PERIOD

- Strict aseptic measures
- Adequate fluid resuscitation
- Avoid gross contamination
- Good surgical techniques should be maintained like
 - Usage of monofilament sutures
 - Limited usage of suture materials
 - To avoid seroma and haematoma formation
 - Usage of drains when needed
- Supplement oxygen

POSTOPERATIVE PERIOD

- Early ambulation
- Early enteral nutrition
- Early removal of drains

- Avoid postoperative bacteraemia
- Chest physiotherapy

MATERIALS AND METHODS

This study was conducted in department of general surgery in Tirunelveli medical college from 2017 to 2018 after getting approval from ethical committee 180 patients were selected for the study from 2017 to 2019 who undergone emergency abdominal surgeries in all the units of surgery department. Every patient was enrolled for this study after getting informed written consent from the patients.

Patient details like diagnosis, investigations, the surgical procedure done, intraoperative findings, postoperative period, prophylactic antibiotics and follow up period were recorded during the study period.

INCLUSION CRITERIA

- All Patients undergone emergency abdominal surgeries

EXCLUSION CRITERIA

- Patients below 12 years of age
- All patients undergone elective abdominal surgeries

The following investigations were done before the surgery

- Blood urea
- Haemoglobin
- Blood glucose
- Creatinine level
- ECG

- X ray chest

PREOPERATIVELY

- Depending on the clinical status patients were initially resuscitated with IV fluids and then they were taken up for surgical procedures
- Prior to the surgery hair shaving was done for every patient
- All patients were given prophylactic antibiotics at the time of induction of anaesthesia.

INTRAOPERATIVELY

- In every patient surgical site is disinfected with povidone solution
- For laparotomy general anaesthesia was given and for acute appendicitis cases spinal anaesthesia was given
- During the procedure the intraoperative peritoneal fluids or abscess were sent for culture
- Antibiotics were started initially and continued until the results of culture and sensitivity

POSTOPERATIVELY

- Patients vitals and general conditions were monitored
- Surgical site wounds were inspected after 48 hours
- Any discharge from wound site or drain site were sent for culture and antibiotics were changed according to the reports
- USG Abdomen was done to rule out any postoperative collections, if present it was managed conservatively initially, if the patient condition deteriorates patient was taken for relaparotomy
- Postoperatively patients were followed up for thirty days

STATISTICAL ANALYSIS AND INTERPRETATIONS

The study subjects were described and interpreted in terms of averages in respect of continuous variables by student independent “t” test. More than two variables were interpreted by Analysis of Variance (ANOVA). The categorical variables were described in terms percentages and interpreted by χ^2 (Chi-square) test. The above statistical procedures were under taken with the help of the statistical package namely IBM SPSS statistics-20. The P-values less than or equal to 0.05 ($P \leq 0.05$) were considered as statistically significant.

RESULTS

TABLE-1: Age and Gender Wise Description Of Study Subjects

Age group	Male		Female		Total	
	Frequency	%	Frequency	%	Frequency	%
< 20	24	11.3	11	6.1	35	19.4
20-29	16	8.9	13	7.2	29	16.1
30-39	23	12.8	7	3.9	30	16.7
40-49	21	11.7	8	4.4	29	16.1
50-59	29	16.1	6	3.3	35	19.4
60-69	7	3.9	7	3.9	14	7.8
70-79	6	3.3	2	1.1	8	4.4
Total	126	70.0	54	30.0	180	100.0
Mean ± SD	39.1±17.0		37.0±18.0		38.5±17.6	
Significance	“t” =0.730, df=178, P=0.466				Range=13-79 = 66	

The above table-1 states the gender and total age distribution of study subjects. The mean ages of males were 39.1±17.0 years and females were 37.0±18.0 years. The difference of ages between the gender was not statistically significant (P>0.05). The mean age of total subjects was 38.5±17.6 years with range of 66 years.

Fig-1: Percentage Distribution of Gender and Total Age Wise Distribution

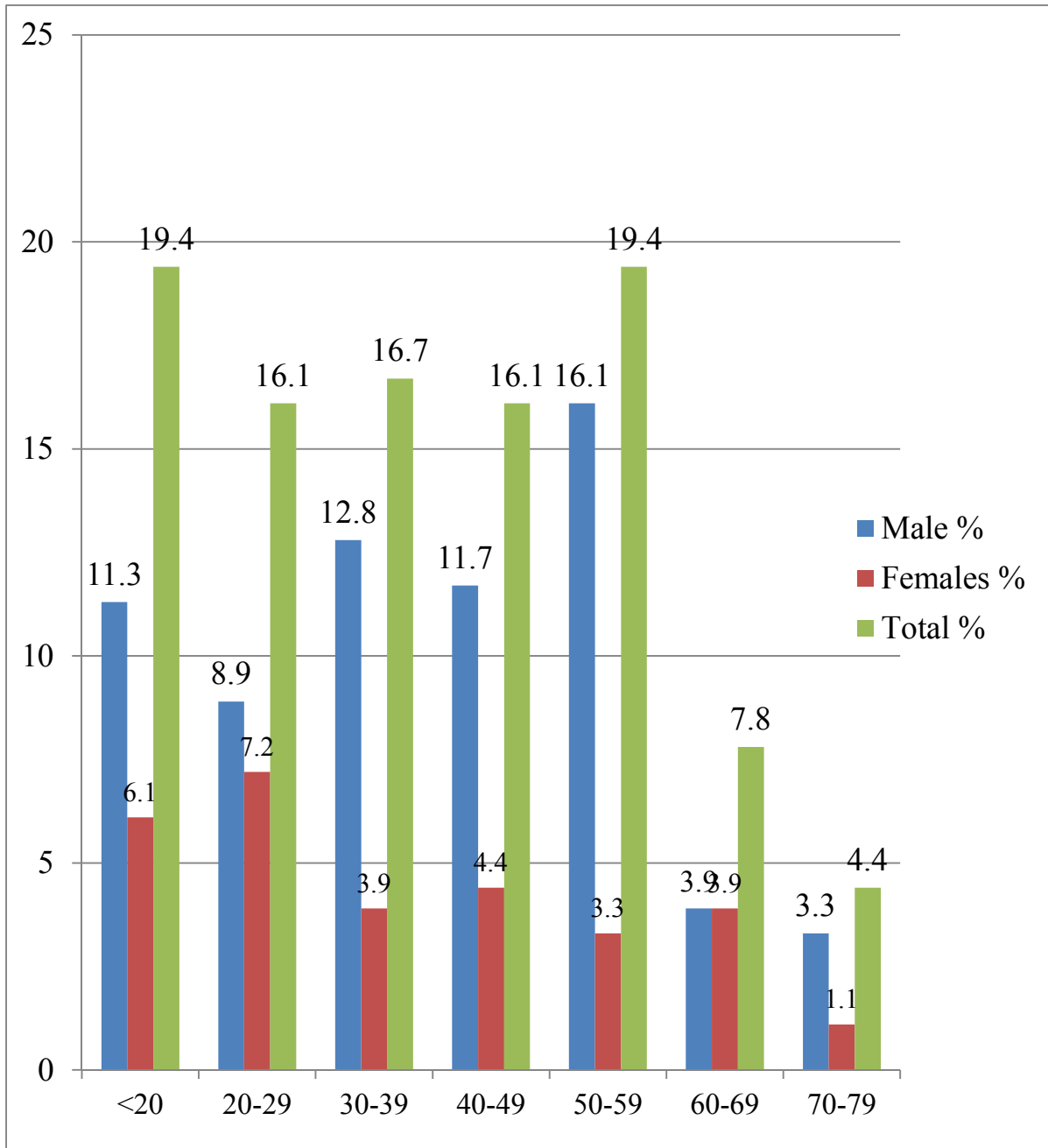


Table-2: Distribution of Diagnosis

SI No	Diagnosis	Frequency	%
1	ACUTE APPENDICITIS	29	16.1
2	ADVANCED CA RECTOSIGMOID	1	.6
3	APPENDICULAR ABSCESS	21	11.7
4	APPENDICULAR PERFORATION	25	13.9
5	BLUNT INJURY ABDOMEN	3	1.7
6	BLUNT INJURY ABDOMEN MESENTRIC TEAR	1	.6
7	BLUNT INJURY ABDOMEN RETROPERITONEAL HAE	1	.6
8	BLUNT INJURY ABDOMEN SPLENIC LACERATION	1	.6
9	BLUNT INJURY LIVERLACERATION	3	1.7
10	BLUNT INJURY SPLENIC LACERATION	1	.6
11	CA RECTOSIGMID	1	.6
12	CAECAL PERFORATION	1	.6
13	COLONIC PERFORATION	1	.6
14	DESCENDING COLON GROWTH	1	.6
15	DU PERFORATION	20	11.1
16	GASTRIC PERFORATION	10	5.6
17	ILEAL PERFORATION	10	5.6

18	ILEAL STRICTURE	1	.6
19	ILEOCAECAL GANGRENE	1	.6
20	INTESTINAL OBSTRUCTION	9	5.0
21	IRREDUCIBLE UMBLICAL HERNIA	1	.6
22	JEJUNAL PERFORATION	7	3.9
23	LEFT OBSTRUCTED INGUINAL HERNIA	1	.6
24	MALIGNANCY SPLENIC FLEXURE GROWTH	1	.6
25	OBSTRUCTED LEFT FEMORAL HERNIA	1	.6
26	OBSTRUCTED PARAUMBILICAL HERNIA	1	.6
27	OBSTRUCTED RIGHT INGUINAL HERNIA	2	1.1
28	OBSTRUCTED UMBLICAL HERNIA	1	.6
29	OBSTRUCTED UNBLICAL HERNIA	1	.6
30	SIGMOID PERFORATION	1	.6
31	SIGMOID VOLVULUS	5	2.8
32	SMALL BOWEL GANGRENE	9	5.0
33	SPLENIC FLEXURE GROWTH	1	.6
34	STAB INJURY ABDOMEN	5	2.8
35	STRANGULATED INCISIONAL HERNIA	2	1.1
36	Total	180	100.0

Table-3: Procedures Performed Among the Study Subjects

Sl. No	Procedures	Frequency	%
1	ADHESION RELEASE	4	2.2
2	APPENDICETOMY	64	35.6
3	BAND RELEASE	4	2.2
4	COLOSIGMOID ANASTAMOSIS	1	.6
5	DIVERSION COLOSTOMY	2	1.1
6	DIVERSION ILIOSTOMY	1	.6
7	DRAINAGE	11	6.1
8	EXPLORATIVE LAPROTOMY	7	3.9
9	HARTMANN PROCEDURE	2	1.1
10	HEPATORAPPHY	2	1.1
11	ILEAL RESECTION AND ANASTAMOSIS	9	5.0
12	LAPROTOMY WITH ABGEL CLOSURE	1	.6
13	LAPROTOMY WITH RESECTION WITH ANAT	1	.6
14	OBSTRUCTION RELEASE WITH HERNIOPLASTY	1	.6
15	OBSTRUCTION RELEASE WITH ANATOMICAL REPAIR	3	1.7
16	OBSTRUCTION RELEASE WITH HERNIOPLASTY	1	.6

17	OBSTRUCTION RELEASE WITH MESH REPAIR	1	.6
18	OBSTRUCTION RELEASE WITH OMENTECTOMY	2	1.1
19	OBSTRUCTION RELEASE WITH MESH REPAIR	1	.6
20	PATCH CLOSURE	47	26.1
21	PRIMARY CLOSURE WITH ILEOSTOMY	1	.6
22	RESECTION ANASTAMOSIS WITH LOOP COLOSTOMY	2	1.1
23	RESECTION END TO SIDE JEJUNAL ASCENDING COLONIC ANASTAMOSIS	1	.6
24	RIGHT HEMICOLECTOMY WITH ILEOTRANSVERSE ANASTAMOSIS	1	.6
25	SPLEENECTOMY	5	2.8
26	TRANSVERSE COLOSTOMY	1	.6
27	TRANSVERSE COLOSTOMY	4	2.2
Total		180	100.0

Table-4: Culture According to The Wound Class

Culture	Wound Class II		Wound Class III		Wound Class IV		Total		Results
	No	%	No	%	No	%	No	%	
E. coli.	1	0.6	4	2.2	7	3.9	12	6.7	$\chi^2 = 14.562$ df= 3 P=0.023
Klebsiella	0	0.0	7	3.9	6	3.3	13	7.2	
Proteus	1	0.6	1	0.6	3	1.7	5	2.8	
No growth	32	17.8	23	12.8	95	52.8	150	83.3	
Total	34	38.3	35	19.4	111	61.7	180	100.0	

The table-4 states the wound class with culture relationship. The relationship between the wound class and culture was statistically significantly differed ($P < 0.05$).

Fig-2: Percentage of Wound Class with Culture

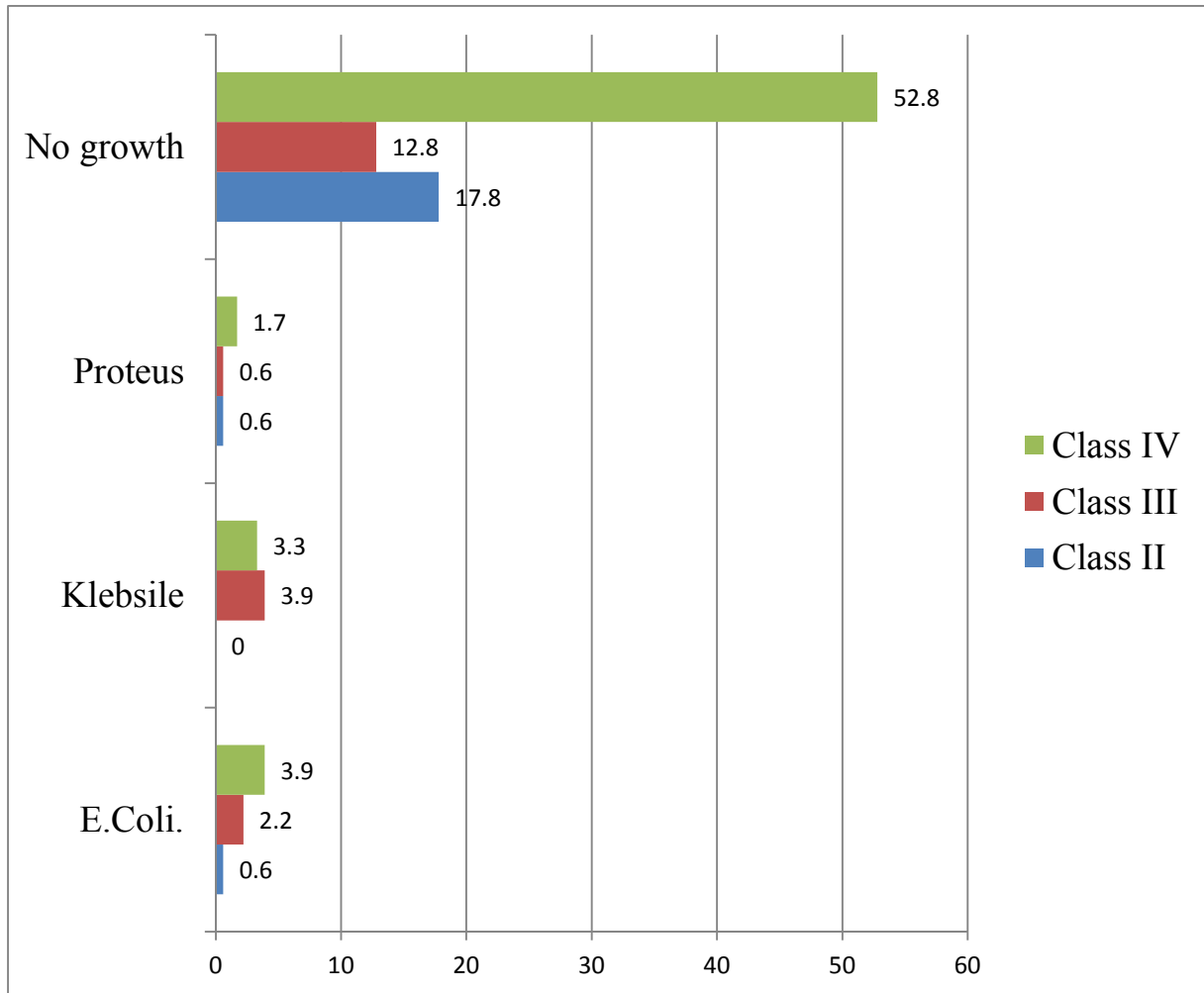


Table-5: Culture according to the Temperature

Culture	Febrile		Afebrile		Total		Results
	No	%	No	%	No	%	
E. Coli.	12	6.7	0	0.0	12	6.7	$\chi^2 = 180.562$ df= 3 P<0.001
Klebsiella	13	7.2	0	0.0	13	7.2	
Proteus	5	2.8	0	0.0	5	2.8	
No growth	0	0.0	150	83.3	150	83.3	
Total	30	16.7	150	83.3	180	100.0	

The table-5 states the culture with temperature. The culture was strongly associated with Febrile (P<0.001) ...

Fig-3: Percentage of culture positive with Febrile

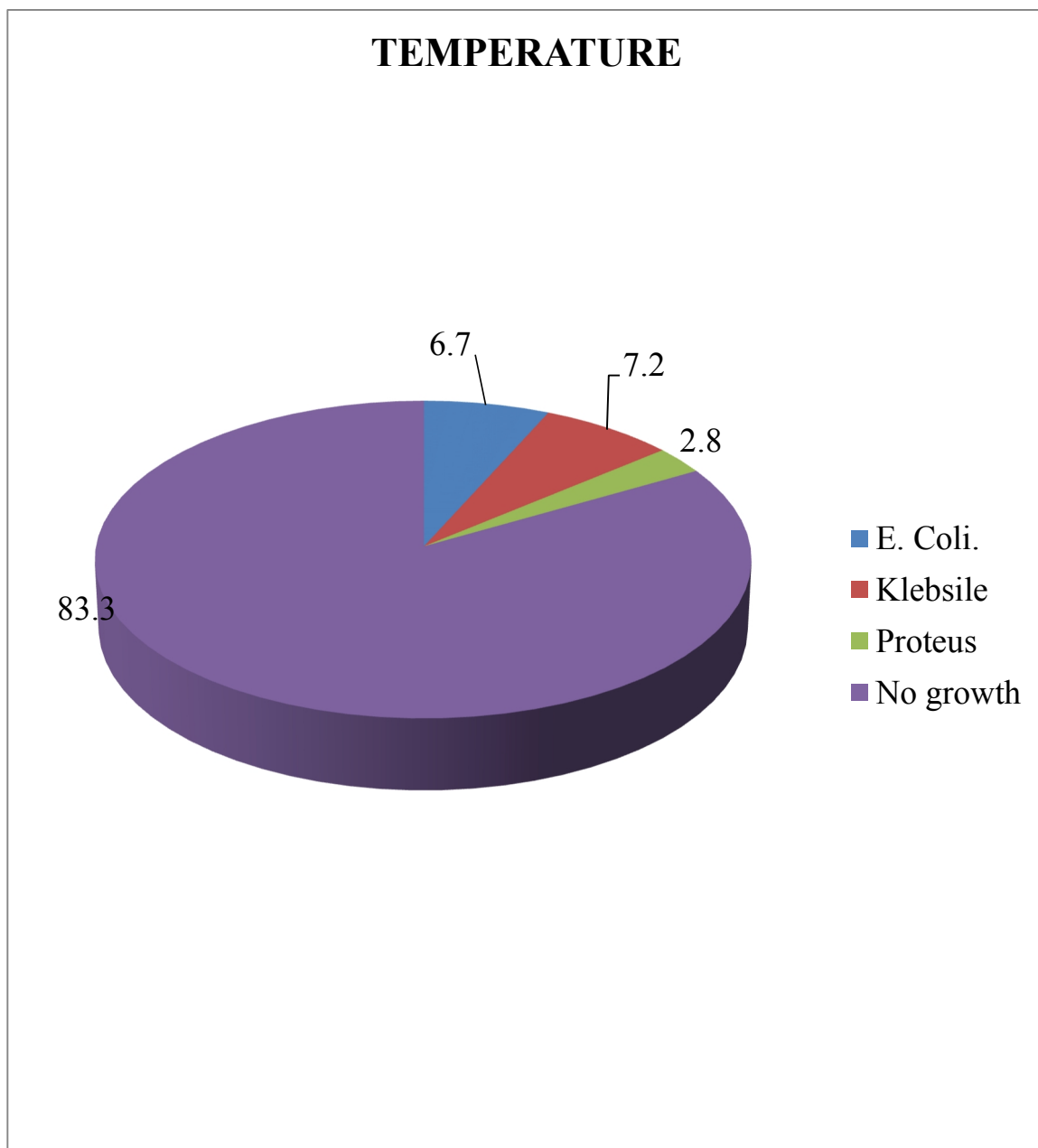


Table-6: Culture according to the RR

Culture	R. R Normal		Tachypneic		Total		Results
	No	%	No	%	No	%	
E. coli.	0	0.0	12	6.7	12	6.7	$\chi^2 = 180.000$ df= 3 P<0.001
Klebsiella	0	0.0	13	7.2	13	7.2	
Proteus	0	0.0	5	2.8	5	2.8	
No growth	150	83.3	0	0.0	150	83.3	
Total	150	83.3	30	83.3	180	100.0	

The table-6 states the culture with RR. The culture was strongly associated with Tachypneic (P<0.001).

Fig-4: Culture Positive with Tachypneic (R.R)

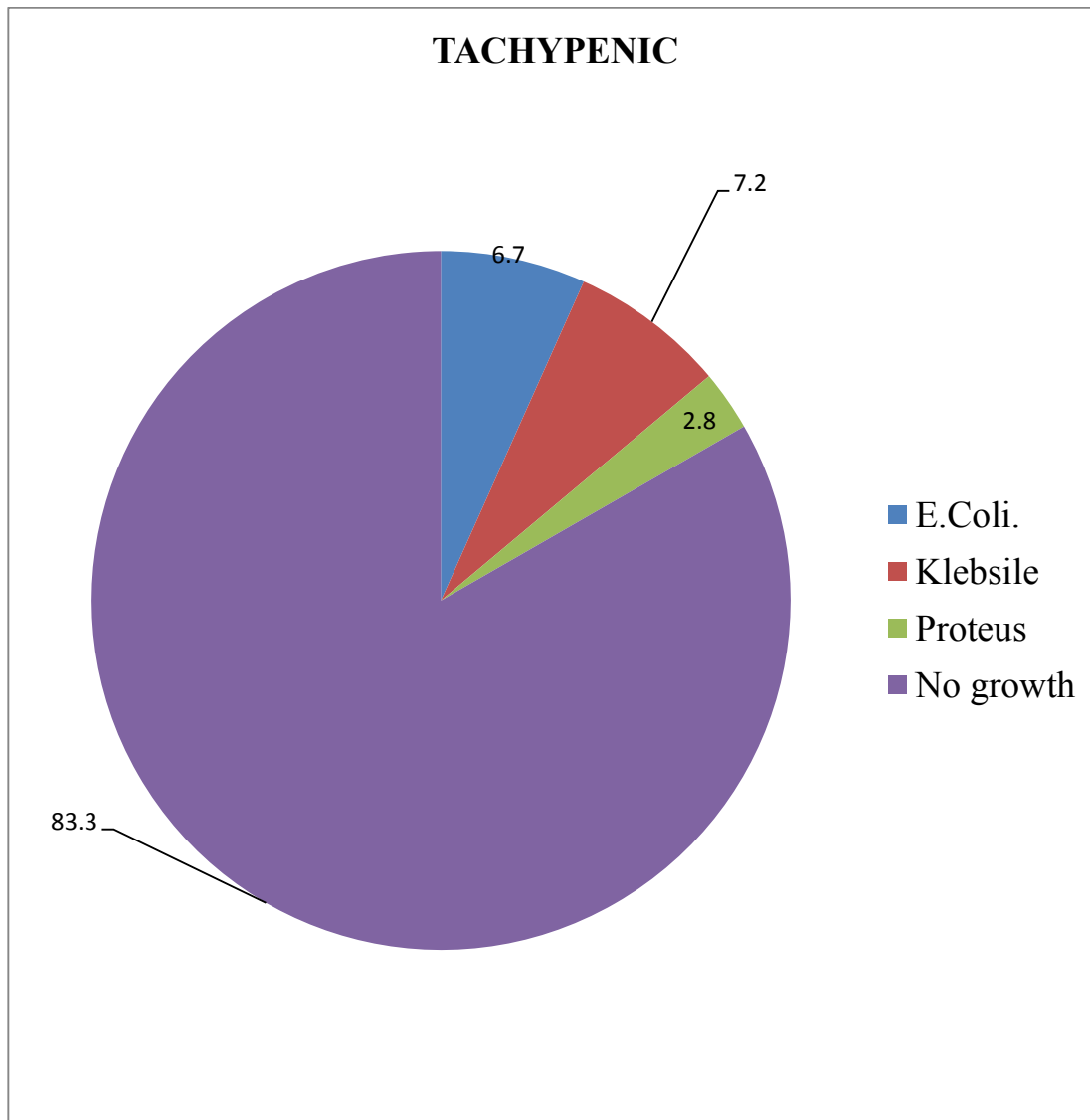


Table-7: Culture According to the Pulse Rate

Culture	PR Normal		Tachycardia		Total		Results
	No	%	No	%	No	%	
E. Coli.	0	0.0	12	6.7	12	6.7	$\chi^2 = 180.000$ df= 3 P<0.001
Klebsiella	0	0.0	13	7.2	13	7.2	
Proteus	0	0.0	5	2.8	5	2.8	
No growth	150	83.3	0	0.0	150	83.3	
Total	150	83.3	30	16.7	180	100.0	

The table-7 states the culture with PR. The culture was strongly associated with Tachycardia (P<0.001).

Fig-5: Culture positive with Tachycardia (P.R)

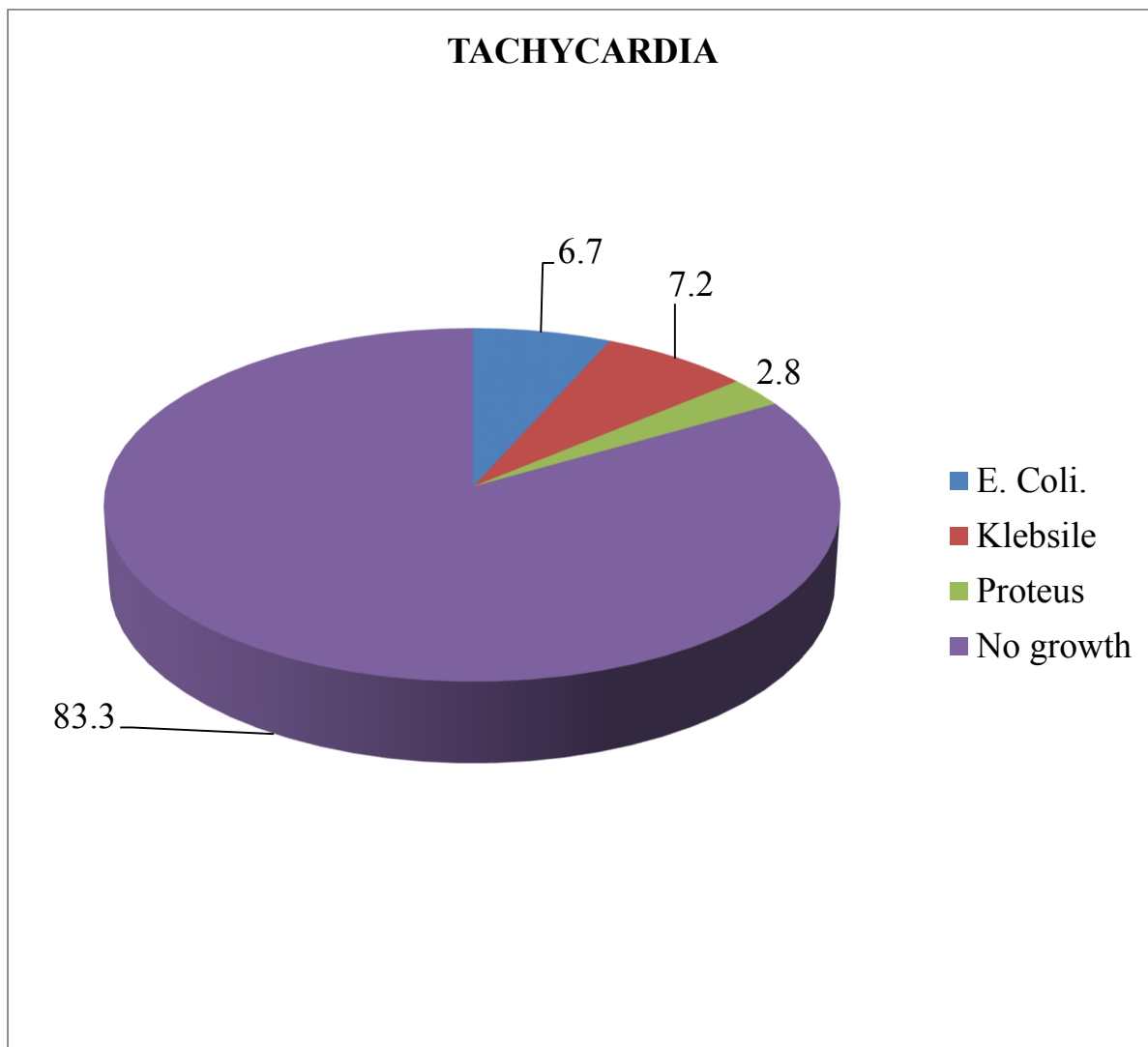


Table-8: Comparison of RBS between Culture and normal

Culture	n	Mean	SD	“F”	df	Sig	Comparison
E. coli	12	163.3	24.4	88.900	3,176	P<0.001	The mean RBS between the cultures were very highly significant
Klebsiella	13	174.6	28.2				
Proteus	5	161.2	47.6				
No growth	150	104.8	16.6				

The table-8 compares the levels of RBS between the cultures. The mean of E. coli RBS was 163.3 ± 24.4 , Klebsiella RBS was 174.6 ± 28.2 , Proteus was 161.2 ± 47.6 and no growth was 104.5 ± 16.6 . The differences between the means were statistically very highly significant ($P < 0.001$).

Fig-6: Mean WBC of culture positive and no growth

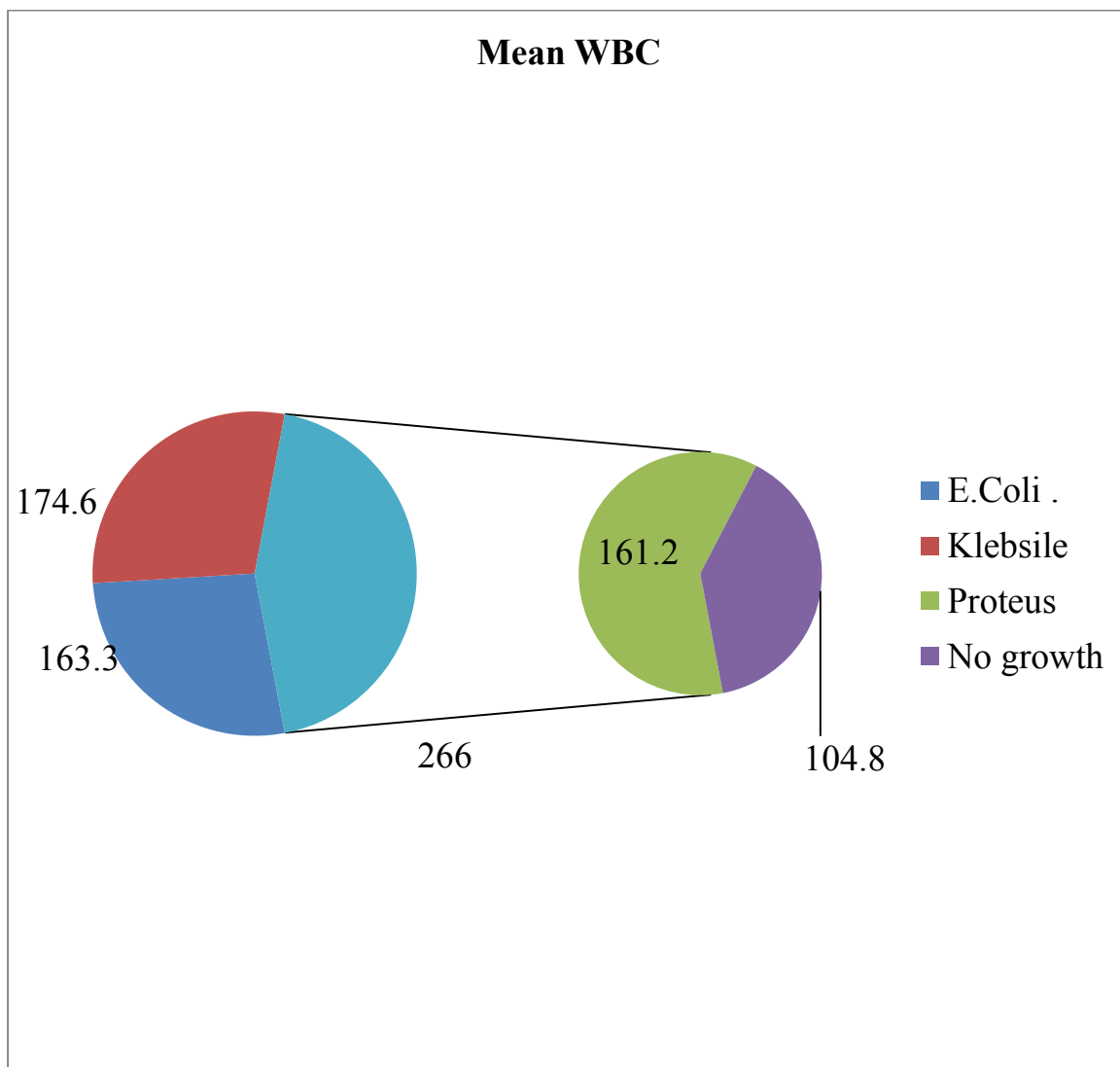


Table-9: Comparison of WBC between Culture and normal

Culture	n	Mean	SD	“F”	df	Sig	Comparison
E. coli.	12	19825	1447.3	74.471	3,176	P<0.001	The mean WBC between the cultures were very highly significant
Klebsiella	13	19369.2	3278.3				
Proteus	5	19780.0.	2385.8				
No growth	150	7410.5	4305.6				

The table-8 compares the levels of WBC between the cultures. The mean of E. coli WBC was 19825.0 ± 1447.3 , Klebsiella WBC was 19369.2 ± 3278.3 , Proteus was 19780.0 ± 2385.8 and no growth was 7410.5 ± 4305.6 . The differences between the means were statistically very highly significant ($P < 0.001$).

Fig-7: Mean comparison WBC between the culture positive

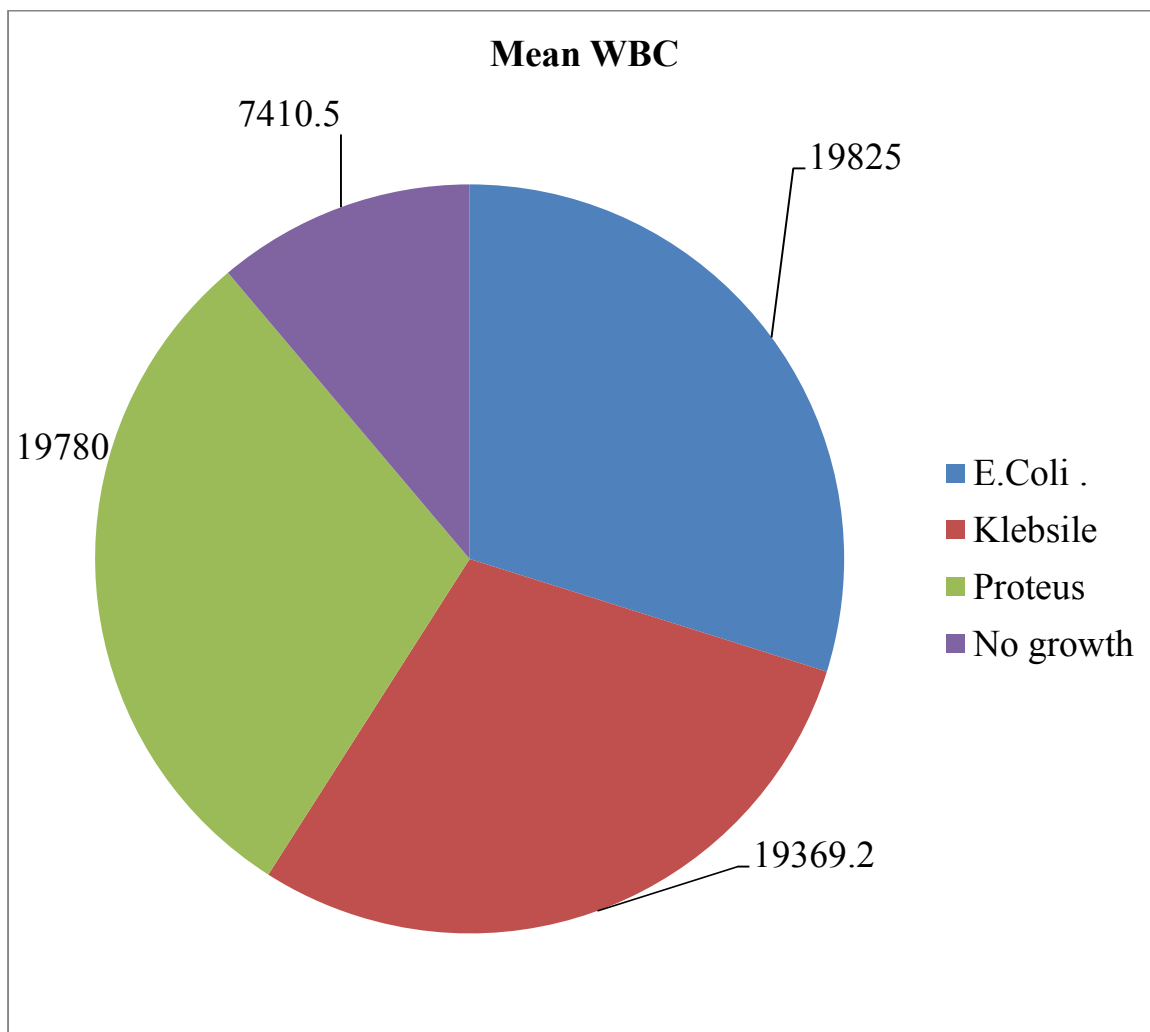


Table-10: Comparison of SBP between Culture and Normal

Culture	n	Mean	SD	“F”	df	Sig	Comparison
E. coli.	12	100.8	20.2	14.854	3,176	P<0.001	The mean SBP between the cultures were very highly significant
Klebsiella	13	100.8	19.8				
Proteus	5	98.0	13.0				
No growth	150	114.7	8.5				

The table-8 compares the levels of WBC between the cultures. The mean of E. coli SBP was 100.8 ± 20.2 , Klebsiella SBP was 100.8 ± 19.8 , Proteus was 98.0 ± 13.0 . and no growth was 114.7 ± 8.5 . The differences between the means were statistically very highly significant ($P < 0.001$).

Fig-8: Mean SBP of culture positive and negative

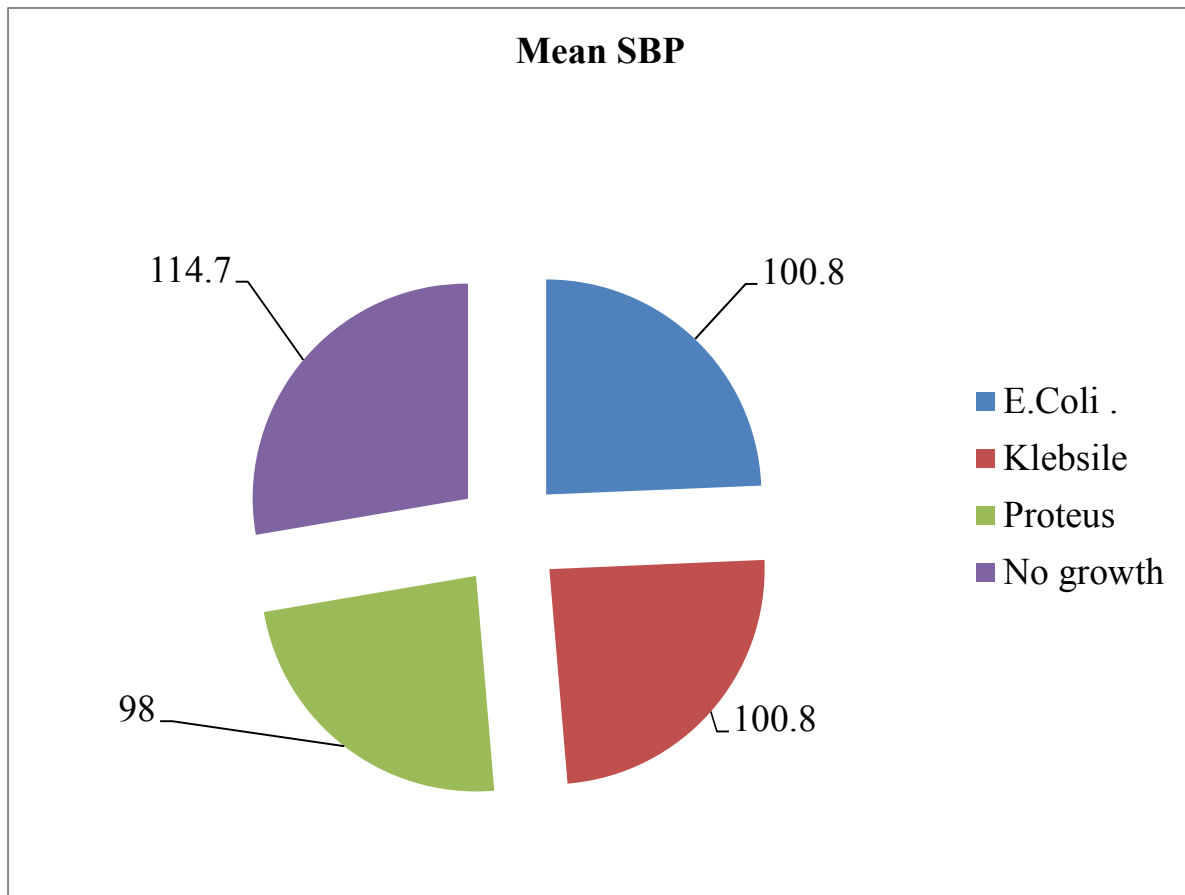


Table-11: Platelet counts according to the culture positive

Culture	Platelet normal		Elevated		Total		Results
	No	%	No	%	No	%	
E. coli.	0	0.0	12	6.7	12	6.7	$\chi^2 = 180.000$ df= 3 P<0.001
Klebsiella	0	0.0	13	7.2	13	7.2	
Proteus	0	0.0	5	2.8	5	2.8	
No growth	150	83.3	0	0.0	150	83.3	
Total	150	83.3	30	16.7	180	100.0	

The table-11 states the culture with Platelet counts. The culture was strongly associated with platelet counts (P<0.001).

Fig-9: Percentage of platelet culture positive

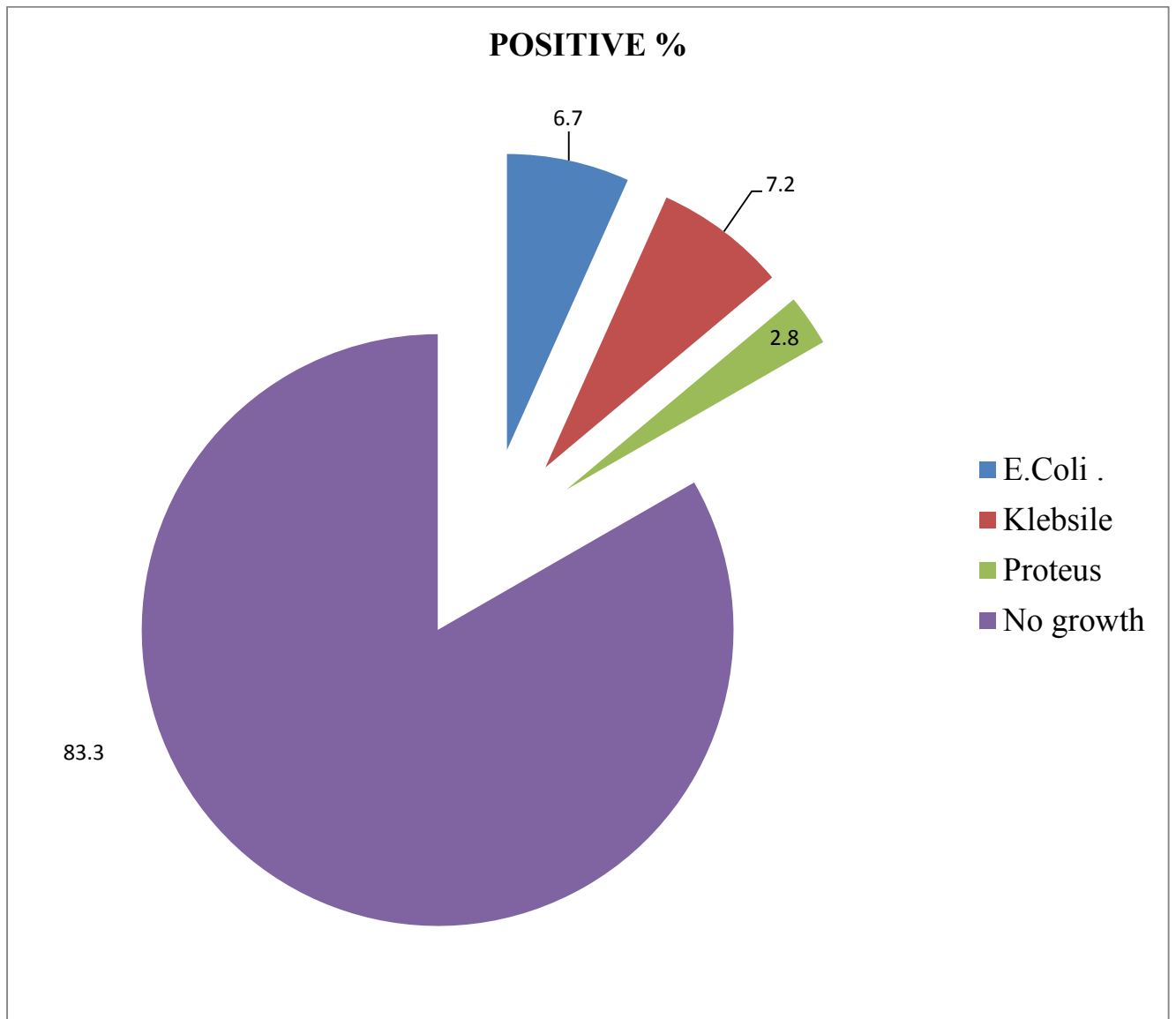


Table-12: RFT according to the culture positive.

Culture	RFT normal		Elevated		Total		Results
	No	%	No	%	No	%	
E. coli.	1	0.6	11	6.1	12	6.7	$\chi^2 = 165.994$ df= 3 P<0.001
Klebsiella	1	0.6	12	6.7	13	7.2	
Proteus	0	0.0	5	2.8	5	2.8	
No growth	150	83.3	0	0.0	150	83.3	
Total	152	84.4	28	15.6	180	100.0	

The table-12 states the culture with Platelet counts. The culture was strongly associated with platelet counts (P<0.001).

Fig-10: Percentage of culture positive of RFT

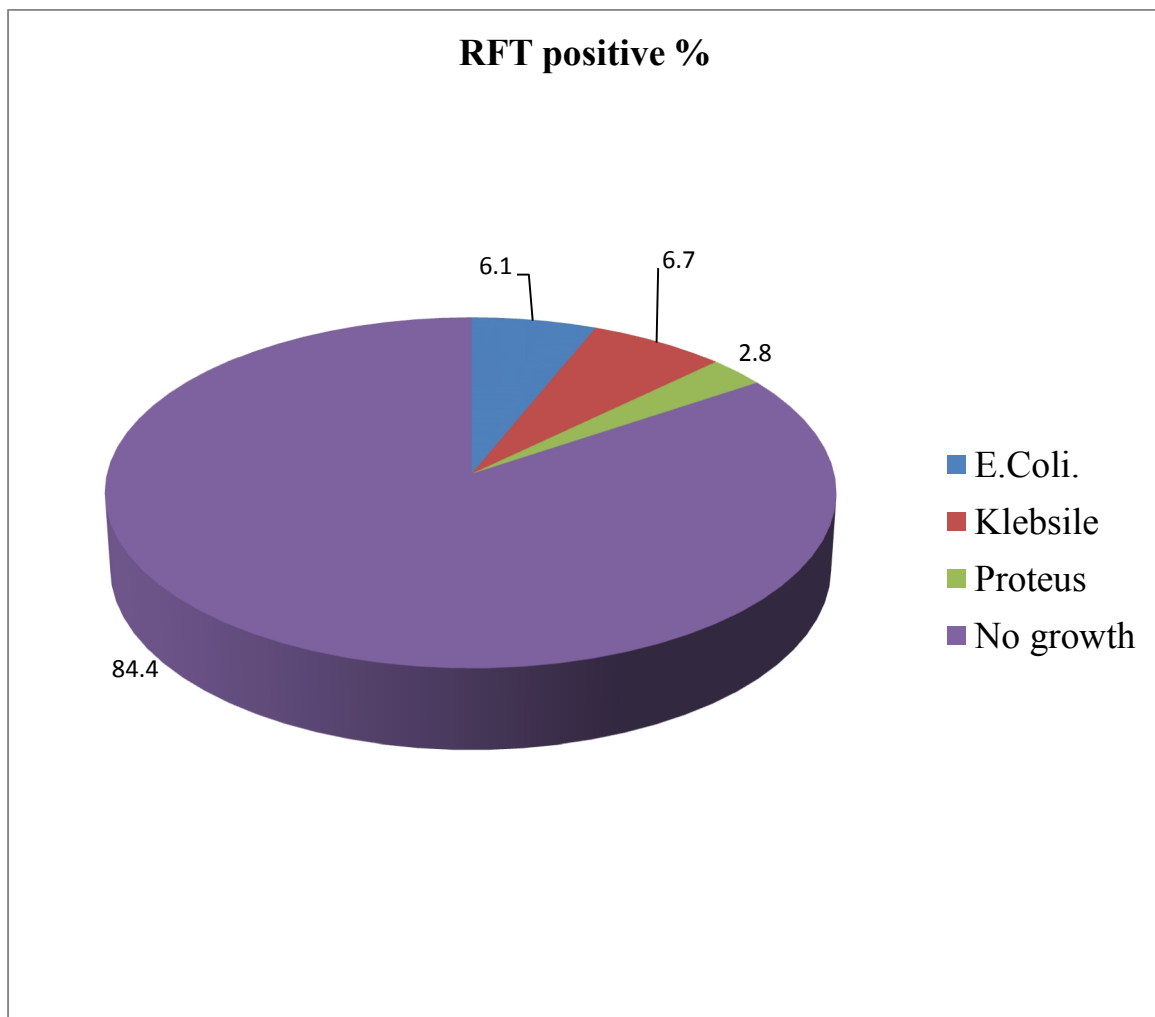


Table-13: LFT according to the culture positive.

Culture	Platelet normal		Elevated		Total		Results
	No	%	No	%	No	%	
E. coli.	0	0.0	12	6.7	12	6.7	$\chi^2 = 180.000$ df= 3 P<0.001
Klebsiella	0	0.0	13	7.2	13	7.2	
Proteus	0	0.0	5	2.8	5	2.8	
No growth	150	83.3	0	0.0	150	83.3	
Total	150	83.3	30	16.7	180	100.0	

The table-13 states the culture with LFT counts. The culture was strongly associated with LFT counts (P<0.001).

Fig-11: Percentage of LFT positive

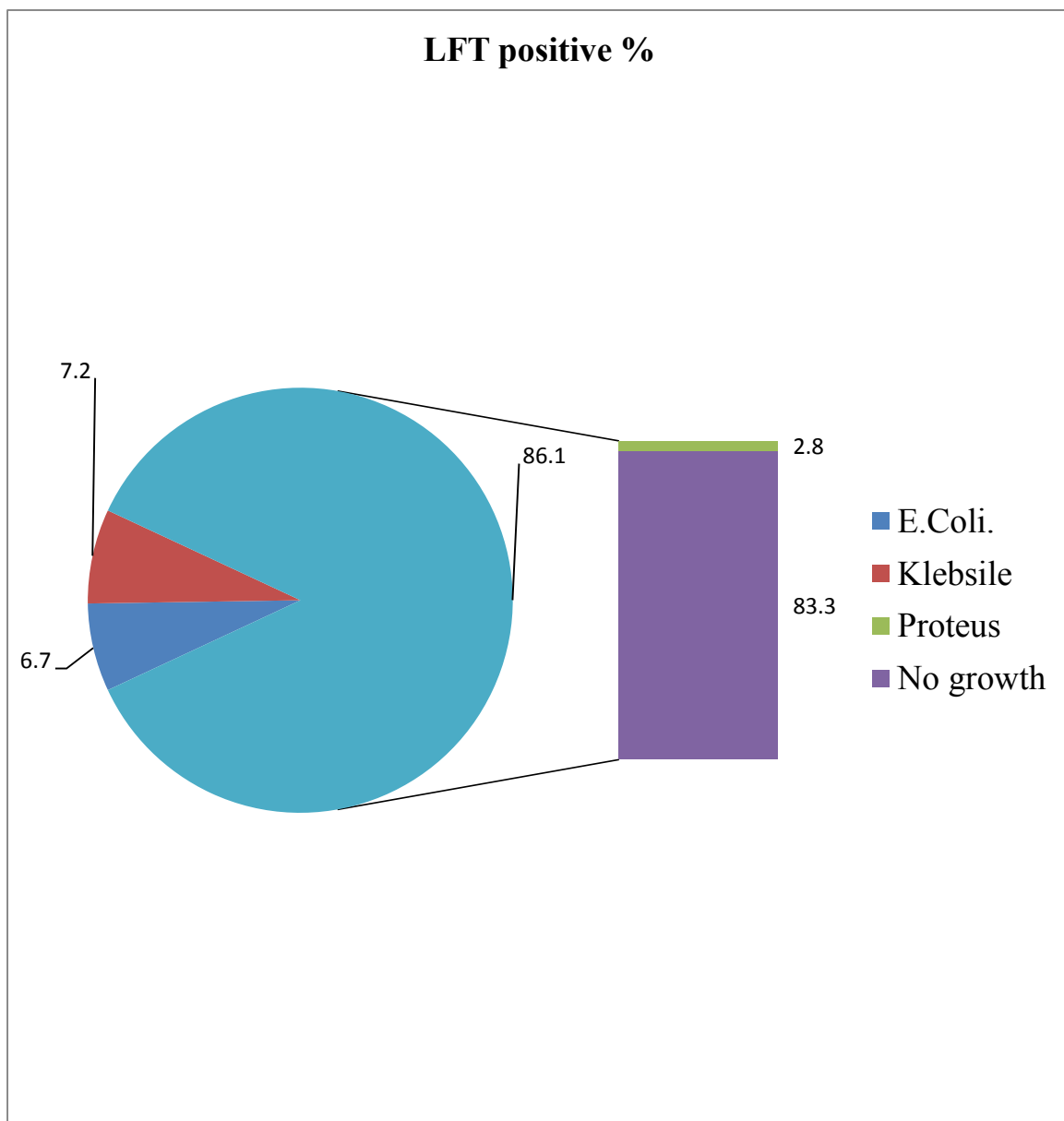


Table-14: ABG according to the culture positive

Culture	Platelet normal		Metabolic Acidosis		Total		Results
	No	%	No	%	No	%	
E. coli.	0	0.0	12	6.7	12	6.7	$\chi^2 = 180.000$ df= 3 P<0.001
Klebsiella	0	0.0	13	7.2	13	7.2	
Proteus	0	0.0	5	2.8	5	2.8	
No growth	150	83.3	0	0.0	150	83.3	
Total	150	83.3	30	16.7	180	100.0	

The table-14 states the culture with Metabolic acidosis. The culture was strongly associated with Metabolic Acidosis (P<0.001).

Fig-12: Percentage of ABG positive culture

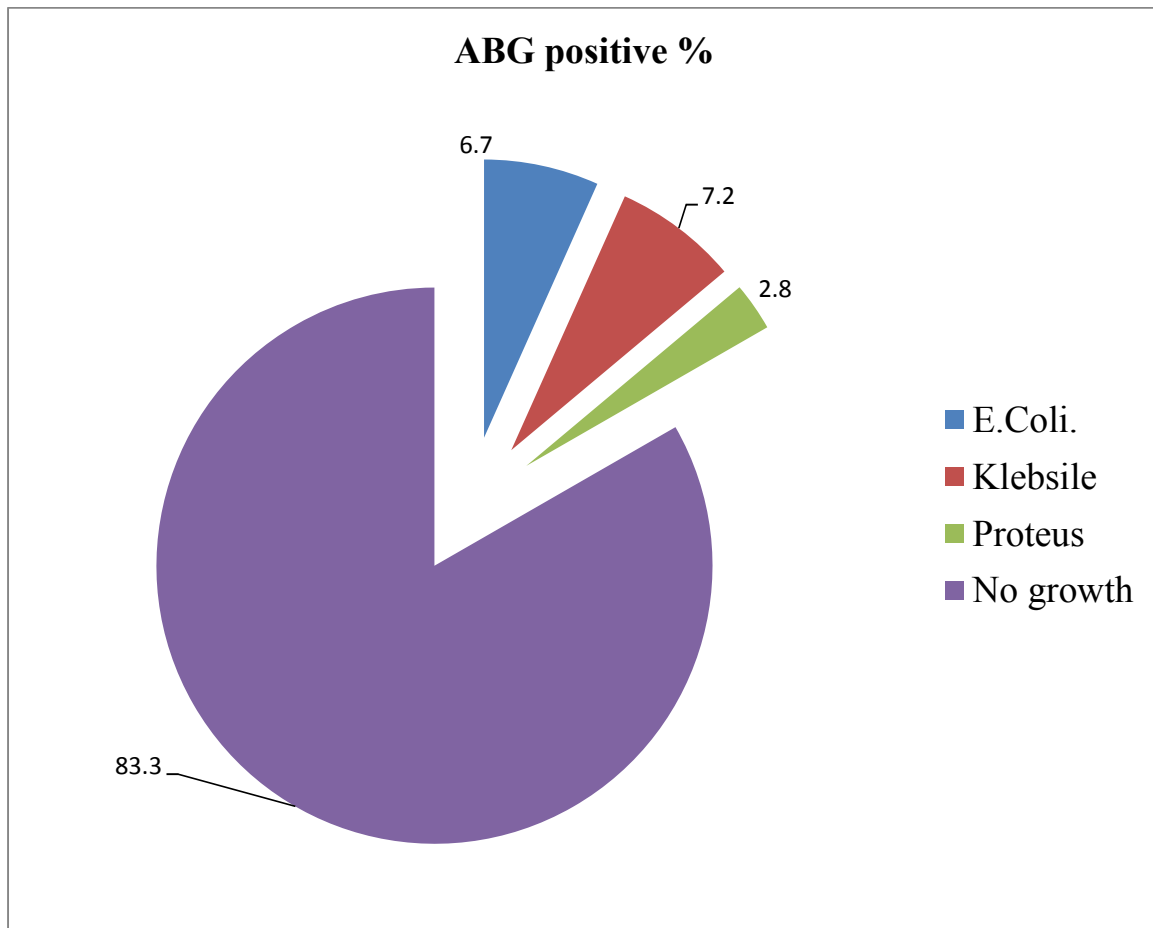


Table-15: INR according to the culture positive

Culture	INR Normal		Elevated		Total		Results
	No	%	No	%	No	%	
E. coli.	0	0.0	12	6.7	12	6.7	$\chi^2 = 180.000$ df= 3 P<0.001
Klebsiella	0	0.0	13	7.2	13	7.2	
Proteus	0	0.0	5	2.8	5	2.8	
No growth	150	83.3	0	0.0	150	83.3	
Total	150	83.3	30	16.7	180	100.0	

The table-15 states the culture with INR. The culture was strongly associated with INR (P<0.001).

FIG-13: CULTURE POSITIVE % OF INR

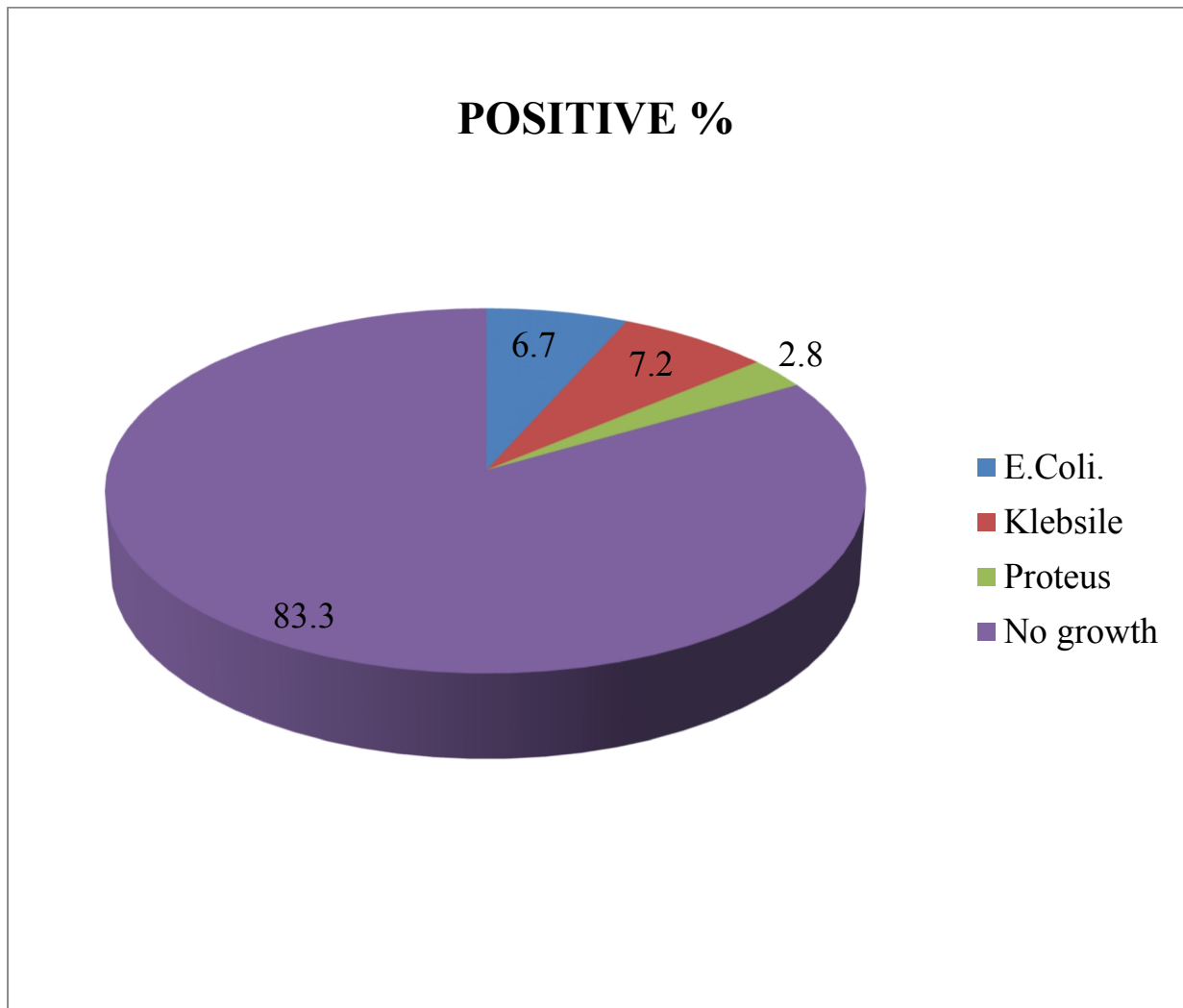
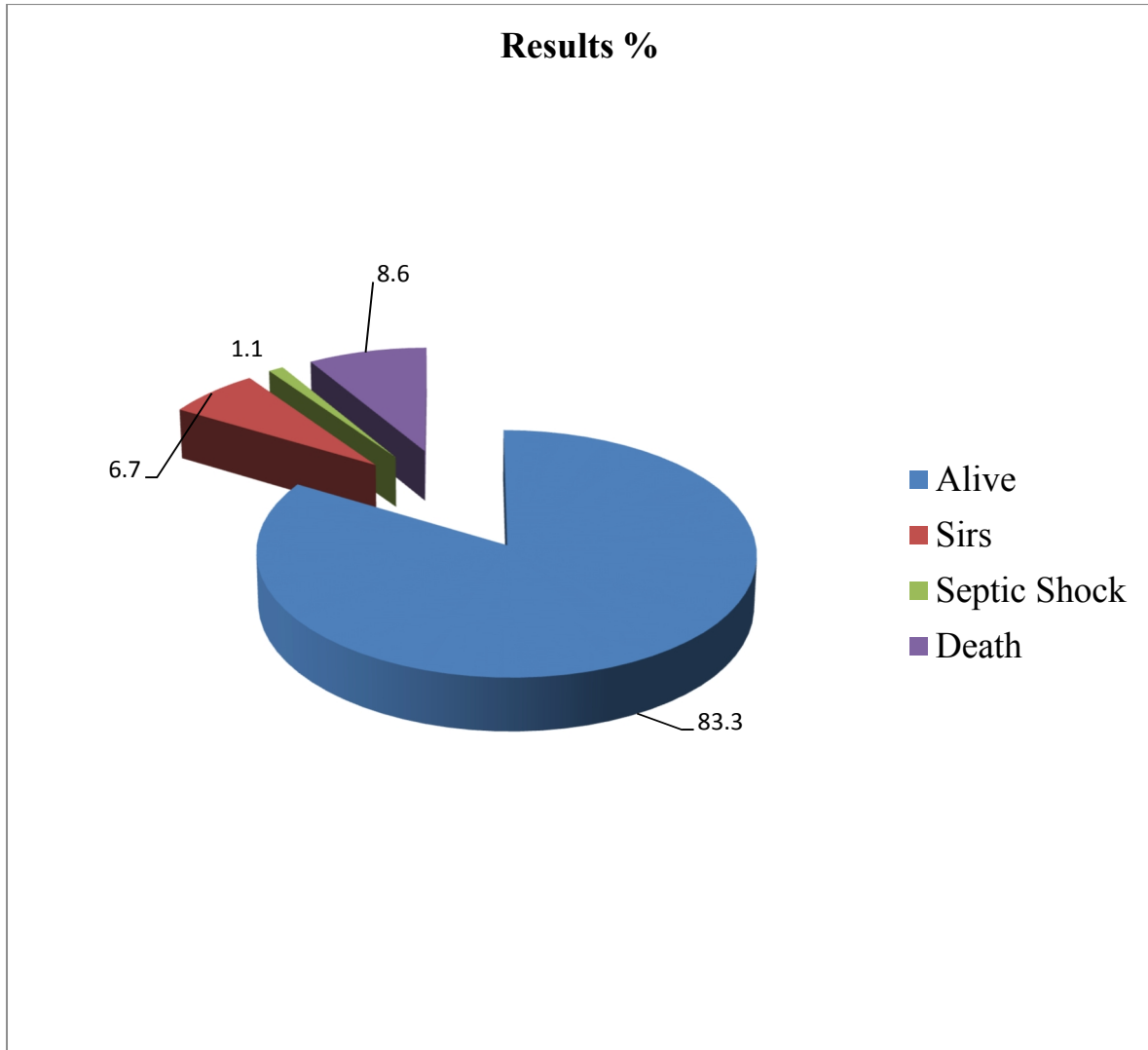


Table-16: Results according to the INR:

Results	INR Normal		Elevated		Total		Results
	No	%	No	%	No	%	
Alive	150	83.3	0	0.0	150	83.3	$\chi^2 = 180.000$ df= 3 P<0.001
Sirs	0	0.0	12	6.7	12	6.7	
Septic Shock	0	0.0	2	1.1	2	1.1	
Death	0	0.0	16	8.9	16	8.9	
Total	150	83.3	30	16.7	180	100.0	

The table-16 states the results with INR. The results were strongly related with INR (P<0.001).

Fig-14: Percentage distribution of results



OBSERVATION

In this study 180 emergency abdominal surgeries were done, among those total number of males were 126 and females were 54.

Emergency appendicectomy is the most common surgeries around 35.6%. this was followed by hollow viscus perforation around 26.1 %. among the hollow viscus perforation duodenal perforation is the most common case.

Small bowel gangrene, intestinal obstruction due to malignancy, blunt injury abdomen, stab injury, obstructed hernias are the next common emergency conditions.

Among the 180 cases during the study,30 patients had postoperative infection with features of sepsis. among these 24 were males and 6 females. the male: female ratio is about 4:1.

The maximum number of infected cases were seen in class IV around 8.9% (16 cases) which was followed by class III 12 cases around 6.7%.

Among the 30 infected cases during the postoperative patient the most common organisms encountered were

Proteus

Klebsiella

E coli

During the surgical procedures preoperative fluids was sent for culture. they showed results as mixed floral infection for perforation. empirical antibiotics were given and was changed after getting culture reports.

Among 30 cases during the study period 12 cases had only features of systemic inflammatory response syndrome and 2 cases has sever septic shock with hypotension, and 16 cases were expired due to severe sepsis with multi organ failure. These 16 cases were major laparotomy cases

Among these cases 2 cases undergone relaparotomy due to wound dehiscence.

These 30 cases have features of sepsis like elevated RFT, thrombocytopenia, abnormal glucose tolerance value, their ABG shows metabolic acidosis, and they show leucocytosis. they have elevated CRP values

DISCUSSION

In this study 180 emergency abdominal surgeries were undergone and among those 30 cases were infected postoperatively, and there were 24 male patients and 6 female patients. The male to female ratio is 4:1.

The incidence of postoperative sepsis by this study is 16.6%

In previous studies it is about 22.8%

The most common emergency surgery is appendicectomy, this was followed by major laparotomy. Duodenal perforation is the common hollow viscus perforation.

- The risk of infection is directly proportional to the gross contamination during the surgical procedure.
- The next predictive factor influencing the postoperative sepsis is the duration of surgery. Long duration increases the risk of infection
- Inadequate bowel preparation, poor fluid correction during the emergency situation attributed to the development of sepsis.
- The risk of contamination of faecal matters during surgery or cross infection with previous cases in the emergency OT theatres increases the chance of postoperative infection.
- Other factors like improper usage of diathermy, poor haemostasis, surgery duration. suture materials usage. Contamination of theatre because of poor ventilation system increase the chance of infection

- Surgeons factors like hand washing technique, normal commensals surgeon's technique also influences the infection rate.
- Patients factors like poor personal hygiene, late identification of signs and symptoms, late admission in health care centres, cigarette smoking and alcohol usage in males and anaemia in females increases the development of sepsis.
- Other causes for postoperative infection are late referral from the peripheral health care centres

The following postoperative measures are essential to control postoperative infection.

- Proper hair shaving and good preparation of surgical site prior to surgery
- Good education to the technicians regarding aseptic environment
- Good theatre environment with good ventilation is necessary for maintaining asepsis environment
- There should be minimal usage of diathermy and suture materials
- Complete irrigation with 0.9%NACL with minimum of about 6L is essential to removal gross contaminated materials
- Without any collections the peritoneal cavity must be thoroughly washed with normal saline
- Complete haemostasis should be maintained

- In case of class IV wounds CRD should be used when ever needed
- Monofilament suture material should be used instead of polyfilament
- Adequate hydration, blood glucose control, and good antibiotics should be used in the postoperative period
- Earlier mobilisation of patient is needed
- Early starting of oral feeding should be done
- Early removal of drain is needed

CONCLUSION

In this study, it is analysed that the factors determining the postoperative sepsis is multifactorial.

In this study the incidence is 16.6%, when compared to previous study like Brun Buisson C et al which is about 22.8% there is a decreasing incidence.

This is due to following measures

PREOPERATIVE PERIOD

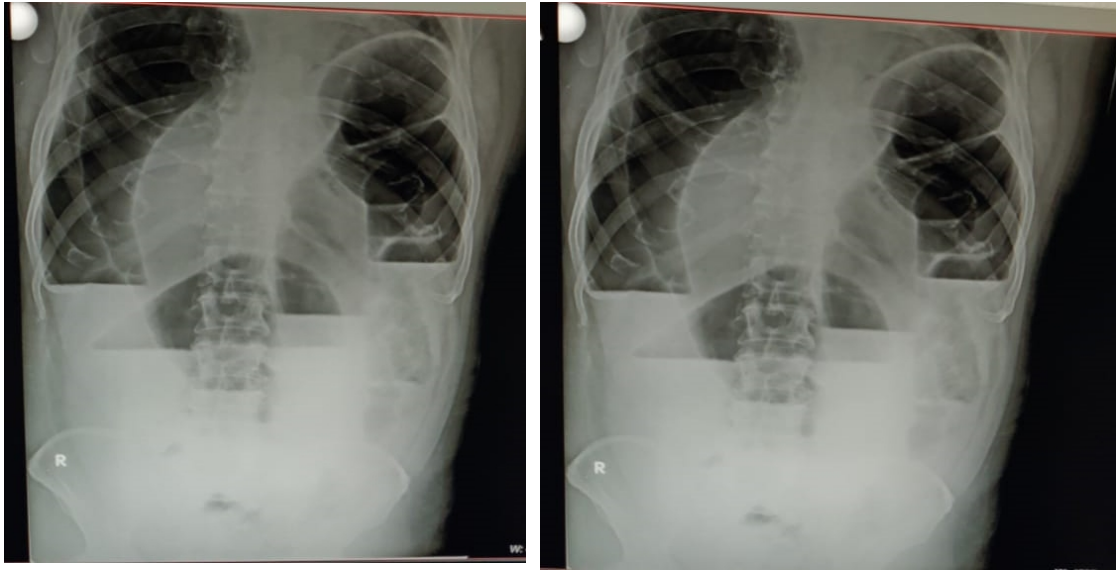
- Good preoperative preparation and hair removal of surgical site
- Proper antibiotic coverage during the procedure
- Good resuscitative measures and fluid correction

INTRAOPERATIVE MEASURES

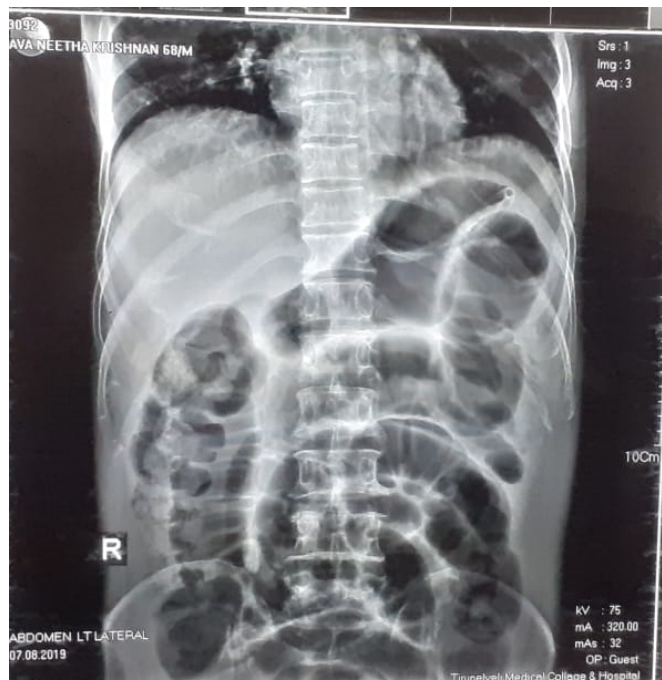
- Good surgical technique
- Proper anastomosis of bowel with adequate vascularity
- Proper haemostasis
- Anaemia correction with blood transfusion
- Exteriorization of bowel when there is cross contamination

POSTOPERATIVE MEASURES

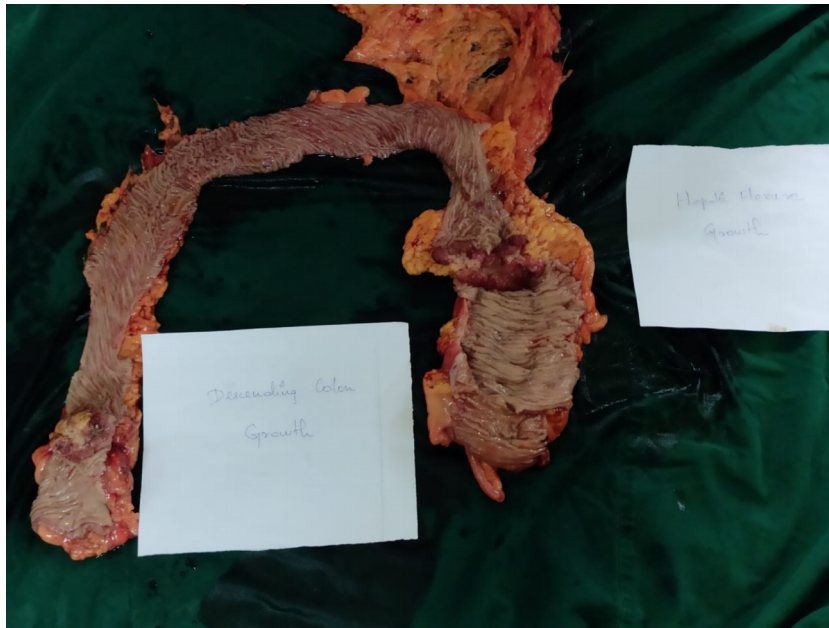
- Early mobilisation and ambulation
- Good antibiotic usage
- Good nutrition status
- Prevention of hypotension



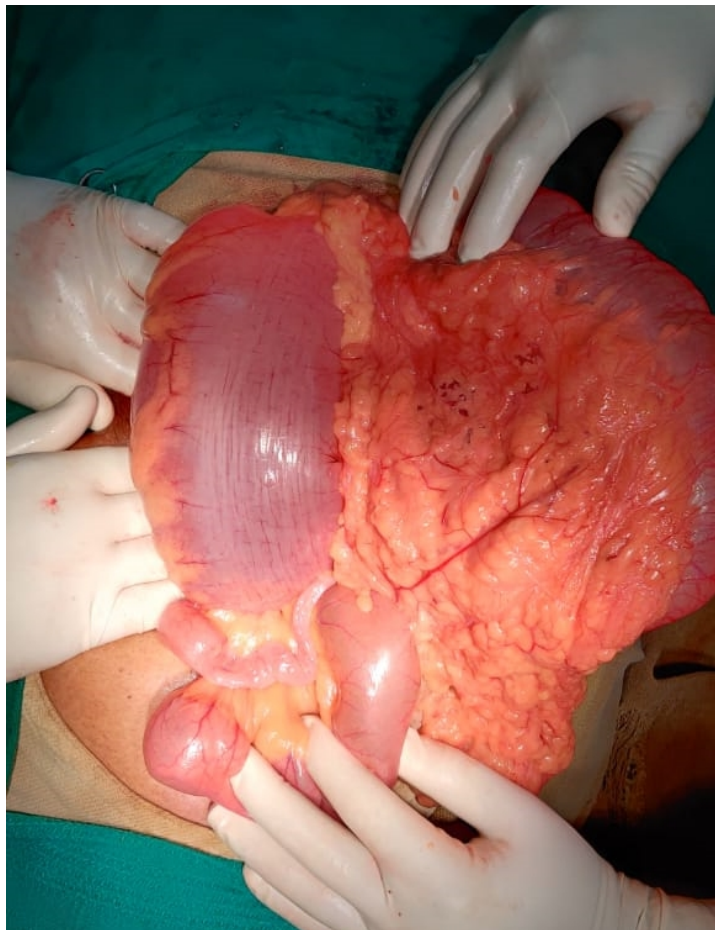
X-Ray Shows dilated bowel loops



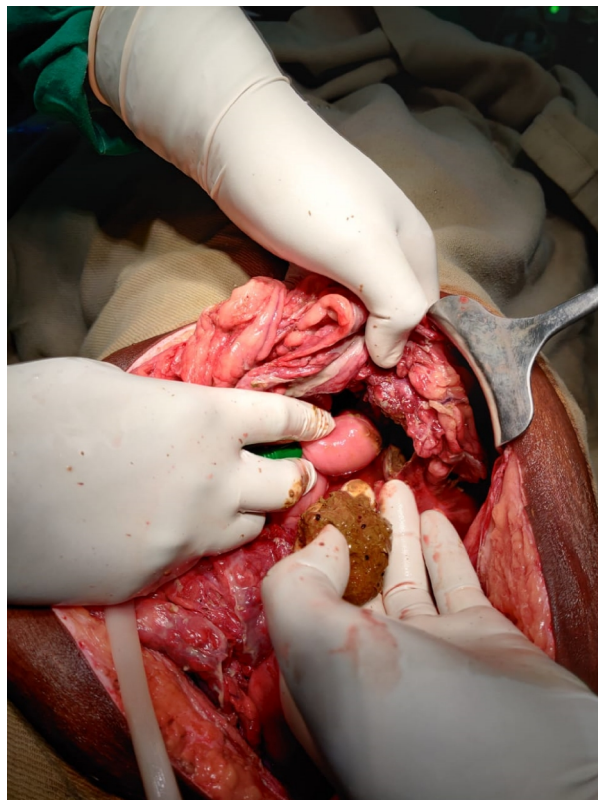
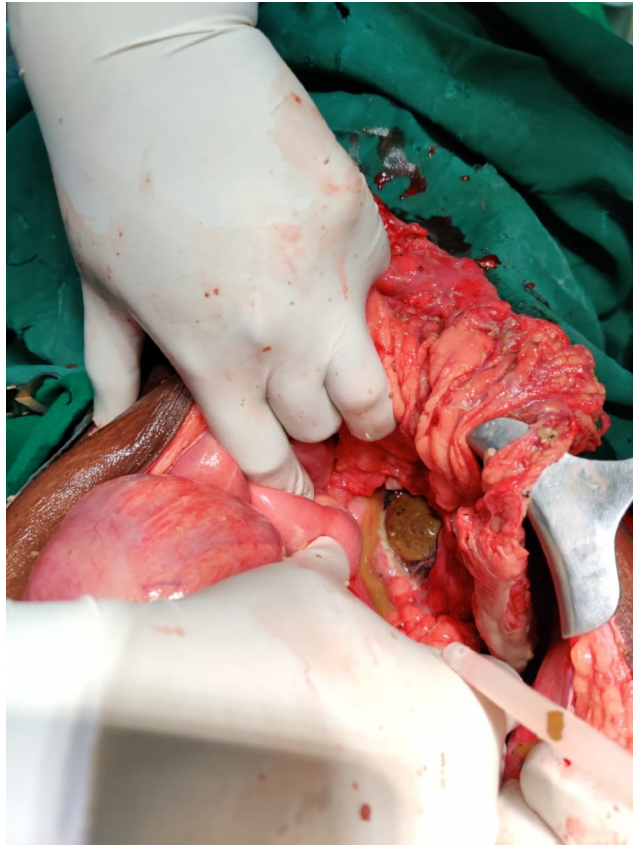
Synchronous tumours in hepatic flexure and descending colon



Dilated transverse colon



Large bowel perforation due to fecal impaction



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PROFORMA

OCCURENCE OF POSTOPERATIVE SEPSIS AFTER EMERGENCY ABDOMINAL SURGERIES

NAME AGE SEX IP NO

ASA GRADE

MAJOR ILLNESS JAUNDICE ANEMIA DM TB HT

NUTRITION SMOKER ALCOHOLIC

DURATION BETWEEN ONSET OF SYMPTOMS AND ADMISSION

SURGERY PLANNED

DURATION OF SURGERY AND PER OPERATIVE FINDINGS

INVESTIGATIONS

CULTURE SENSITIVITY

POSTOPERATIVE PERIOD

ANTIBIOTICS

SIGNS OF SEPSIS

IF PRESENT INTERVENTION DONE

OUTCOME

**நோயாளிகளுக்கு அறிவிப்பு மற்றும் ஒப்புதல் படிவம்
(மருத்துவ ஆய்வில் பங்கேற்பதற்கு)**

ஆய்வு செய்யப்படும் தலைப்பு:

பங்கு பெறுவரின் பெயர்:

பங்கு பெறுவரின் வயது:

		பங்கு பெறுவர் இதனை குறிக்கவும் ✓
1.	நான் மேலே குறிப்பிட்டுள்ள மருத்துவ ஆய்வின் விவரங்களை படித்து புரிந்து கொண்டேன். என்னுடைய சந்தேகங்களை கேட்கவும், அதற்கான தகுந்த விளக்கங்களை பெறவும் வாய்ப்பளிக்கப்பட்டுள்ளது என அறிந்து கொண்டேன்.	<input type="checkbox"/>
2.	நான் இவ்வாய்வில் தன்னிச்சையாக தான் பங்கேற்கிறேன். எந்த காரணத்தினாலோ எந்த கட்டத்திலும், எந்த சட்ட சிக்கலுக்கும் உட்படாமல் நான் இவ்வாய்வில் இருந்து விலகி கொள்ளலாம் என்றும் அறிந்து கொண்டேன்.	<input type="checkbox"/>
3.	இந்த ஆய்வு சம்பந்தமாகவோ, இதை சார்ந்து மேலும் ஆய்வு மேற்கொள்ளும் போதும் இந்த ஆய்வில் பங்குபெறும் மருத்துவர் என்னுடைய மருத்துவ அறிக்கைகளை பார்ப்பதற்கு என் அனுமதி தேவையில்லை என அறிந்து கொள்கிறேன். நான் ஆய்வில் இருந்து விலகிக் கொண்டாலும் இது பொருந்தும் என அறிகிறேன்.	<input type="checkbox"/>
4.	இந்த ஆய்வின் மூலம் கிடைக்கும் தகவலையோ, முடிவையோ பயன்படுத்திக் கொள்ள மறுக்க மாட்டேன்.	<input type="checkbox"/>
5.	இந்த ஆய்வில் பங்கு கொள்ள ஒப்புக் கொள்கிறேன் எனக்கு கொடுக்கப்பட்ட அறிவுரைகளின் படி நடந்து கொள்வதுடன், ஆய்வை மேற்கொள்ளும் மருத்துவ அணிக்கு உண்மையுடன் இருப்பேன் என்று உறுதியளிக்கிறேன். என் உடல் நலம் பாதிக்கப்பட்டாலோ, அல்லது எதிர்பாராத, வழக்கத்திற்கு மாறான நோய்குறி தென்பட்டாலோ உடனே இதை மருத்துவ அணியிடம் தெரிவிப்பேன் என உறுதி அளிக்கிறேன்.	<input type="checkbox"/>

பங்கேற்பவரின் கையொப்பம் / இடம்

கட்டைவிரல் ரேகை

பங்கேற்பவரின் பெயர் மற்றும் விலாசம்

ஆய்வாளரின் கையொப்பம் / இடம்

ஆய்வாளரின் பெயர்

மையம்

கல்வியறிவு இல்லாதவற்கு (கைரேகை வைத்தவர்களுக்கு) இது அவசியம் தேவை

சாட்சியின் கையொப்பம் / இடம்

பெயர் மற்றும் விலாசம்

S NO	NAME	AGE	SEX	IP NO	DIAGNOSIS	PROCEDURE	WOUND CLASS	TEMPERATURE	CULTURE	RR	RBS	PR	WBC	CRP	BP	RFT	PLATELETS	LFT	ABG	INR	Results
1	DINESH KUMAR	25	MALE	53764	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	9000	NORMAL	110/70	NORMAL	1.4	NORMAL	NORMAL LIMIT	normal	Alive
2	ANBARASAN	21	MALE	60793	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	90	NORMAL	12000	NORMAL	110/70	NORMAL	1.6	NORMAL	NORMAL LIMIT	normal	Alive
3	KALIMUTHU	17	MALE	42662	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	115	NORMAL	8000	NORMAL	120/70	NORMAL	1.4	NORMAL	NORMAL LIMIT	normal	Alive
4	SUBILAN	15	MALE	42005	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	6700	NORMAL	130/80	NORMAL	1.5	NORMAL	NORMAL LIMIT	normal	Alive
5	JAMSHED ALI	21	MALE	48132	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	80	NORMAL	5600	NORMAL	130/81	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
6	ARUMUGASAMY	17	MALE	49845	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	89	NORMAL	9800	NORMAL	130/82	NORMAL	2.7	NORMAL	NORMAL LIMIT	normal	Alive
7	MUTHUBAVIN	17	MALE	52753	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	78	NORMAL	8900	NORMAL	110/60	NORMAL	2.8	NORMAL	NORMAL LIMIT	normal	Alive
8	JAGADESH KUMAR	21	MALE	55572	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	90	NORMAL	6700	NORMAL	110/90	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
9	PAULRAJ	18	MALE	57198	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	115	NORMAL	13980	NORMAL	110/60	NORMAL	3.8	NORMAL	NORMAL LIMIT	normal	Alive
10	ANBARASAN	21	MALE	60973	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	89	NORMAL	12789	NORMAL	110/60	NORMAL	3.5	NORMAL	NORMAL LIMIT	normal	Alive
11	VIGNESHWAREN	14	MALE	66247	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	86	NORMAL	7600	NORMAL	110/60	NORMAL	3.6	NORMAL	NORMAL LIMIT	normal	Alive
12	MUNIYANDI	30	MALE	88534	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	80	NORMAL	16000	NORMAL	110/60	NORMAL	2.9	NORMAL	NORMAL LIMIT	normal	Alive
13	PUNITHAN	34	MALE	3970	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	85	NORMAL	15000	NORMAL	110/60	NORMAL	2.9	NORMAL	NORMAL LIMIT	normal	Alive
14	ARUMUGAM	38	MALE	7862	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	116	NORMAL	9876	NORMAL	110/60	NORMAL	3	NORMAL	NORMAL LIMIT	normal	Alive
15	KANAGARAJ	28	MALE	7829	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	119	NORMAL	7844	NORMAL	110/60	NORMAL	3	NORMAL	NORMAL LIMIT	normal	Alive
16	RATHNA SINGH	45	MALE	7786	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	116	NORMAL	8799	NORMAL	120/70	NORMAL	3	NORMAL	NORMAL LIMIT	normal	Alive
17	SUGHAGAR	14	MALE	17813	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	102	NORMAL	10000	NORMAL	110/60	NORMAL	3	NORMAL	NORMAL LIMIT	normal	Alive
18	CHIDAMBARAM	14	MALE	39042	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	8700	NORMAL	110/60	NORMAL	2.2	NORMAL	NORMAL LIMIT	normal	Alive
19	SUNDARLINGAM	18	MALE	39382	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	113	NORMAL	8800	NORMAL	110/60	NORMAL	2.5	NORMAL	NORMAL LIMIT	normal	Alive
20	KARTHIKEYAN	15	MALE	48032	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	115	NORMAL	8600	NORMAL	110/60	NORMAL	2.3	NORMAL	NORMAL LIMIT	normal	Alive
1	KAVYA	14	FEMALE	7013	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	119	NORMAL	9800	NORMAL	110/60	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
2	POOVARASI	20	FEMALE	8704	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	113	NORMAL	9108	NORMAL	110/60	NORMAL	4	NORMAL	NORMAL LIMIT	normal	Alive
3	MARIYAMMAL	20	FEMALE	16785	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	121	NORMAL	12768	NORMAL	110/60	NORMAL	3.4	NORMAL	NORMAL LIMIT	normal	Alive
4	KABILA	18	FEMALE	38948	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	116	NORMAL	13001	NORMAL	110/60	NORMAL	3.9	NORMAL	NORMAL LIMIT	normal	Alive
5	BALASARASWATHY	28	FEMALE	51749	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	117	NORMAL	12789	NORMAL	110/60	NORMAL	3.7	NORMAL	NORMAL LIMIT	normal	Alive
6	SELVI	19	FEMALE	71817	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	95	NORMAL	7008	NORMAL	110/60	NORMAL	3.8	NORMAL	NORMAL LIMIT	normal	Alive
7	LAKSHMI	60	FEMALE	86750	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	70	NORMAL	9907	NORMAL	110/60	NORMAL	3.5	NORMAL	NORMAL LIMIT	normal	Alive
8	RAJALAKSHMI	13	FEMALE	3986	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	80	NORMAL	8890	NORMAL	110/60	NORMAL	2.9	NORMAL	NORMAL LIMIT	normal	Alive
9	MAHALAKSHMI	14	FEMALE	6287	ACUTE APPENDICITIS	APPENDICETOMY	CLASS II	A FEBRILE	NO GROWTH	NORMAL	97	NORMAL	5678	NORMAL	110/60	NORMAL	2.6	NORMAL	NORMAL LIMIT	normal	Alive
1	SUDHAN	17	MALE	2250	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	95	NORMAL	13000	NORMAL	110/60	NORMAL	2.2	NORMAL	NORMAL LIMIT	normal	Alive
2	MANIKANDAN	13	MALE	18567	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	119	NORMAL	13880	NORMAL	110/60	NORMAL	2.2	NORMAL	NORMAL LIMIT	normal	Alive
3	SURESH	13	MALE	18676	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	114	NORMAL	5633	NORMAL	110/60	NORMAL	2.2	NORMAL	NORMAL LIMIT	normal	Alive
4	SINGARAJ	17	MALE	31535	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	7668	NORMAL	110/60	NORMAL	3.1	NORMAL	NORMAL LIMIT	normal	Alive
5	MARUTHAIYA		MALE	37420	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	103	NORMAL	7655	NORMAL	110/60	NORMAL	3.1	NORMAL	NORMAL LIMIT	normal	Alive

S NO	NAME	AGE	SEX	IP NO	DIAGNOSIS	PROCEDURE	WOUND CLASS	TEMPERATURE	CULTURE	RR	RBS	PR	WBC	CRP	BP	RFT	PLATELETS	LFT	ABG	INR	Results
6	CHERMAPANDI	50	MALE	59088	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	febrile	klebsilia	TACHYPNEIC	160	TACHYCARDIA	19500	60	130/80	NORMAL	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
7	THIRUVASAL	40	MALE	21348	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	109	NORMAL	8882	NORMAL	110/60	NORMAL	3.1	NORMAL	NORMAL LIMIT	normal	Alive
8	SUBHURAJ	22	MALE	28188	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	110	NORMAL	9000	NORMAL	110/60	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
9	SUDALAIMANI	43	MALE	29820	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	126	NORMAL	9812	NORMAL	110/80	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
10	ARUN	17	MALE	1583	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	115	NORMAL	10001	NORMAL	130/80	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
11	AJAY	13	MALE	90355	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	114	NORMAL	12765	NORMAL	110/62	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
12	VELU	28	MALE	84879	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	112	NORMAL	13000	NORMAL	120/70	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
13	KUMAR	30	MALE	73110	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	110	NORMAL	14567	NORMAL	120/70	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
14	SEKAR	19	MALE	7654	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	100	NORMAL	13003	NORMAL	140/70	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
15	PANDYAN	14	MALE	980365	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	106	NORMAL	5600	NORMAL	150/60	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
1	MATHI	23	FEMALE	18345	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	108	NORMAL	7800	NORMAL	110/67	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
2	MARISELVI	30	FEMALE	20178	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	109	NORMAL	8700	NORMAL	110/68	NORMAL	3.2	NORMAL	NORMAL LIMIT	normal	Alive
3	REKA	13	FEMALE	26886	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	111	NORMAL	9800	NORMAL	110/69	NORMAL	1.9	NORMAL	NORMAL LIMIT	normal	Alive
4	GOMATHI	33	FEMALE	78135	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	110	NORMAL	9875	NORMAL	110/70	NORMAL	1.5	NORMAL	NORMAL LIMIT	normal	Alive
5	PRIYA	13	FEMALE	86816	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	112	NORMAL	7844	NORMAL	110/71	NORMAL	1.2	NORMAL	NORMAL LIMIT	normal	Alive
6	LAKSHMI	60	FEMALE	86750	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	114	NORMAL	6500	NORMAL	110/72	NORMAL	1.3	NORMAL	NORMAL LIMIT	normal	Alive
7	JANAKI	28	FEMALE	29936	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	115	NORMAL	8754	NORMAL	110/73	NORMAL	1.4	NORMAL	NORMAL LIMIT	normal	Alive
8	INDRA	40	FEMALE	16335	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	117	NORMAL	9000	NORMAL	110/74	NORMAL	1.5	NORMAL	NORMAL LIMIT	normal	Alive
9	AVUDAYAMMAL	47	FEMALE	40898	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	116	NORMAL	9854	NORMAL	110/60	NORMAL	1.7	NORMAL	NORMAL LIMIT	normal	Alive
10	RAJINA	16	FEMALE	40958	APPENDICULAR PERFORATION	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	118	NORMAL	8930	NORMAL	130/70	NORMAL	1.9	NORMAL	NORMAL LIMIT	normal	Alive
1	Manojkumar	18	MALE	4523	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	110	NORMAL	8790	NORMAL	120/70	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
2	Ravichandran	18	MALE	90865	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	120	NORMAL	9871	NORMAL	140/80	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
3	Deepak	20	MALE	8754	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	100	NORMAL	11000	NORMAL	110/60	NORMAL	1.2	NORMAL	NORMAL LIMIT	normal	Alive
4	Selvam	30	MALE	4553	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	116	NORMAL	11987	NORMAL	110/60	NORMAL	1.7	NORMAL	NORMAL LIMIT	normal	Alive
5	murugan	21	MALE	8734	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	117	NORMAL	11876	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
6	Ayyanar	34	MALE	87734	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	Afebrile	NO GROWTH	NORMAL	119	NORMAL	11765	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
7	Radhakrishnan	43	MALE	98463	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	febrile	E.COLI	TACHYPNEIC	145	TACHYCARDIA	19000	67	120/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
8	Munusamy	23	MALE	2314	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	Afebrile	NO GROWTH	NORMAL	90	NORMAL	11980	NORMAL	110/60	NORMAL	3.2	NORMAL	NORMAL LIMIT	normal	Alive
9	Mani	35	MALE	6521	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	Afebrile	NO GROWTH	NORMAL	98	NORMAL	12000	NORMAL	110/60	NORMAL	4	NORMAL	NORMAL LIMIT	normal	Alive
10	Jayaraj	28	MALE	76529	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	Afebrile	NO GROWTH	NORMAL	95	NORMAL	13543	NORMAL	110/60	NORMAL	3.3	NORMAL	NORMAL LIMIT	normal	Alive
11	Kaja Moideen	30	MALE	98635	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	Afebrile	NO GROWTH	NORMAL	78	NORMAL	12444	NORMAL	110/78	NORMAL	3.2	NORMAL	NORMAL LIMIT	normal	Alive
1	RAMYA	44	FEMALE	12689	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	88	NORMAL	13000	NORMAL	110/60	NORMAL	3.1	NORMAL	NORMAL LIMIT	normal	Alive
2	NAGAMMAL	34	FEMALE	34432	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	86	NORMAL	12980	NORMAL	110/60	NORMAL	2.5	NORMAL	NORMAL LIMIT	normal	Alive
3	RUKMANI	21	FEMALE	48728	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	Afebrile	NO GROWTH	NORMAL	80	NORMAL	9000	NORMAL	110/60	NORMAL	2.7	NORMAL	NORMAL LIMIT	normal	Alive

S NO	NAME	AGE	SEX	IP NO	DIAGNOSIS	PROCEDURE	WOUND CLASS	TEMPERATURE	CULTURE	RR	RBS	PR	WBC	CRP	BP	RFT	PLATELETS	LFT	ABG	INR	Results
4	DIVYA	32	FEMALE	36528	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	8900	NORMAL	110/60	NORMAL	3	NORMAL	NORMAL LIMIT	normal	Alive
5	PALANIAMMAL	29	FEMALE	37458	APPENDICULAR ABSCESS	APPENDICETOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	118	NORMAL	8995	NORMAL	110/60	NORMAL	4	NORMAL	NORMAL LIMIT	normal	Alive
6	JANSI	28	FEMALE	25784	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	115	NORMAL	9890	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
7	RITHIKA	45	FEMALE	93763	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	7600	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
8	POOVATHAL	27	FEMALE	2421	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	116	NORMAL	14000	NORMAL	110/60	NORMAL	3.4	NORMAL	NORMAL LIMIT	normal	Alive
9	SABIYA	33	FEMALE	74678	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	119	NORMAL	15000	NORMAL	110/60	NORMAL	2.6	NORMAL	NORMAL LIMIT	normal	Alive
10	RIHANA	19	FEMALE	12356	APPENDICULAR ABSCESS	DRAINAGE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	125	NORMAL	6800	NORMAL	110/60	NORMAL	2.4	NORMAL	NORMAL LIMIT	normal	Alive
1	Arumugamainar	36	MALE	9604	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	80	NORMAL	6000	NORMAL	130/70	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
2	Shanmugasamy	37	MALE	12495	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	97	NORMAL	4500	NORMAL	130/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
3	Chinna Prakash	53	MALE	24677	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	79	NORMAL	7800	NORMAL	110/80	NORMAL	2.4	NORMAL	NORMAL LIMIT	normal	Alive
4	Subramaniam	60	MALE	9642	DU PERFORATION	PATCH CLOSURE	CLASS IV	febrile	PROTEUS	TACHYPNEIC	140	TACHYCARDIA	17000	89	110/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
5	Ramar	58	MALE	342	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	9000	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
6	Sankarappan	75	MALE	1121	DU PERFORATION	PATCH CLOSURE	CLASS IV	febrile	E COLI	TACHYPNEIC	170	TACHYCARDIA	20000	70	110/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
7	MANIKARAJ	45	MALE	24779	DU PERFORATION	PATCH CLOSURE	CLASS IV	febrile	klebsilia	TACHYPNEIC	160	TACHYCARDIA	18000	60	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
8	Verrapandi	55	MALE	87553	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	100	NORMAL	5700	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
9	Murugan	55	MALE	7542	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	115	NORMAL	7000	NORMAL	110/60	NORMAL	2.7	NORMAL	NORMAL LIMIT	normal	Alive
10	Manikandan	34	MALE	4534	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	90	NORMAL	10000	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
11	Marimuthu	33	MALE	66324	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	114	NORMAL	5500	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
12	Vairamuthu	45	MALE	34667	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	5500	NORMAL	110/60	NORMAL	1.9	NORMAL	NORMAL LIMIT	normal	Alive
13	GANESAN	45	MALE	97653	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	119	NORMAL	7600	NORMAL	110/60	NORMAL	1.7	NORMAL	NORMAL LIMIT	normal	Alive
14	KISHORE KUMAR	42	MALE	25788	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	9700	NORMAL	110/	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
15	ARUMUGAM	35	MALE	55788	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	100	NORMAL	7700	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
16	PAULRAJ	54	MALE	12345	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	80	NORMAL	7800	NORMAL	110/60	NORMAL	2.5	NORMAL	NORMAL LIMIT	normal	Alive
17	VASANTH	16	MALE	2345	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	75	NORMAL	8000	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
1	SUBBULAKSHMI	75	FEMALE	4352	DU PERFORATION	PATCH CLOSURE	CLASS IV	febrile	E.COLI	TACHYPNEIC	150	TACHYCARDIA	20400	80	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
2	SHANMUGAKANI	60	FEMALE	76563	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	80	NORMAL	9800	NORMAL	110/60	NORMAL	3.1	NORMAL	NORMAL LIMIT	normal	Alive
3	SELVI	25	FEMALE	1290	DU PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	100	NORMAL	10000	NORMAL	110/60	NORMAL	3	NORMAL	NORMAL LIMIT	normal	Alive
1	MUNIYANDI	55	MALE	89065	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	90	NORMAL	9700	NORMAL	110/60	NORMAL	1.4	NORMAL	NORMAL LIMIT	normal	Alive
2	SANKARANARAYANAN	59	MALE	6780	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	febrile	PROTEUS	TACHYPNEIC	120	TACHYCARDIA	19900	78	110/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
3	MURUGAN	33	MALE	5684	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	116	NORMAL	8000	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
4	LAKSHMANAN	53	MALE	43789	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	febrile	E/COLI	TACHYPNEIC	170	TACHYCARDIA	19000	78	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
5	BALAMURUGAN	29	MALE	34557	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	10000	NORMAL	110/60	NORMAL	1.5	NORMAL	NORMAL LIMIT	normal	Alive
6	SENTHIL TANGAM	39	MALE	8656	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	115	NORMAL	7800	NORMAL	110/	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
7	KARUPPASAMY	57	MALE	2464	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	117	NORMAL	7700	NORMAL	110/60	NORMAL	2.5	NORMAL	NORMAL LIMIT	normal	Alive

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8	Chinna	60	MALE	56849	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	8700	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
9	MUNIVEL	55	MALE	75674	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	112	NORMAL	6000	NORMAL	110/60	NORMAL	2.1	NORMAL	NORMAL LIMIT	normal	Alive
1	ESAKKIYAMMAL	45	FEMALE	54209	GASTRIC PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	117	NORMAL	5500	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
1	GANESAN	65	MALE	23987	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	febrile	E COLI	TACHYPNEIC	160	TACHYCARDIA	19000	70	110/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
2	SENTHIL	40	MALE	1278	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	100	NORMAL	7000	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
3	GURUSWAMY	66	MALE	7652	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	90	NORMAL	8000	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
4	KARUPPASAMY	40	MALE	8542	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	febrile	PROTEUS	TACHYPNEIC	180	TACHYCARDIA	23000	80	90/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
5	VELUSAMY	50	MALE	76532	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	76	NORMAL	9700	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
6	SARAVANAN	67	MALE	24389	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	70	NORMAL	9000	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
7	MADHAN	40	MALE	45976	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	90	NORMAL	6500	NORMAL	110/60	NORMAL	2.5	NORMAL	NORMAL LIMIT	normal	Alive
8	KUMAR	35	MALE	65358	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	8700	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
1	ESAKKIYAMMAL	50	FEMALE	87342	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	100	NORMAL	8000	NORMAL	110/60	NORMAL	3	NORMAL	NORMAL LIMIT	normal	Alive
2	MUTHUSELVI	65	FEMALE	9054	ILEAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	119	NORMAL	7500	NORMAL	110/60	NORMAL	2.9	NORMAL	NORMAL LIMIT	normal	Alive
1	MUTHU	45	MALE	1238	JEJUNAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	7800	NORMAL	110/60	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
2	VADIVELU	55	MALE	5379	JEJUNAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	95	NORMAL	10100	NORMAL	110/60	NORMAL	1.4	NORMAL	NORMAL LIMIT	normal	Alive
3	VERAMANI	34	MALE	1256	JEJUNAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	90	NORMAL	10000	NORMAL	110/60	NORMAL	1.5	NORMAL	NORMAL LIMIT	normal	Alive
4	MUTHUVEL	56	MALE	76112	JEJUNAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	80	NORMAL	9800	NORMAL	110/60	NORMAL	1.8	NORMAL	NORMAL LIMIT	normal	Alive
5	KATHIRAVAN	76	MALE	45123	JEJUNAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	90	NORMAL	9000	NORMAL	110/60	NORMAL	1.7	NORMAL	NORMAL LIMIT	normal	Alive
6	PERIYASWAMY	50	MALE	43765	JEJUNAL PERFORATION	PATCH CLOSURE	CLASS IV	febrile	klebsilia	TACHYPNEIC	160	TACHYCARDIA	18000	70	90/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
7	NAINAR	57	MALE	63914	CAECAL PERFORATION	PRIMARY CLOSURE WITH ILEOSTOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	8400	NORMAL	110/60	NORMAL	1.6	NORMAL	NORMAL LIMIT	normal	Alive
1	ANAGAMMAL		FEMALE	9803	JEJUNAL PERFORATION	PATCH CLOSURE	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	120	NORMAL	7000	NORMAL	110/60	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
1	SEENIVASAN	56	MALE	678	SIGMOID PERFORATION	TRANSVERSE COLOSTOMY	CLASS IV	febrile	e.coli	tachypnic	160	tachycardia	24000	70	80/50	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
2	KARTHIESWARI	26	FEMALE	3214	COLONIC PERFORATION	HARTMANN PROCEDURE	CLASS IV	febrile	klebsilia	tachypnic	170	tachycardia	25000	60	90/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
1	Kanagaraj	53	MALE	98765	SIGMOID VOLVOLUS	DIVERSION COLOSTOMY	CLASS II	FEbrile	PROTEUS	TACHYPNEIC	130	tachycardia	18000	70	100/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
2	LAKSHMANAN	54	MALE	4567	SIGMOID VOLVOLUS	COLOSIGMOID ANASTAMOSIS	CLASS II	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	NORMAL	NORMAL	130/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
3	VELSWAMY	38	MALE	6534	SIGMOID VOLVOLUS	RESECTION ANASTAMOSIS WITH LOOP COLOSTOMY	CLASS II	febrile	E.COLI	TACHYPNEIC	150	TACHYCARDIA	20000	80	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
1	GOVINDHARAJAN	30	MALE	4180	STAB INJURY ABDOMEN	EXPLORATIVE LAPROTOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	NORMAL	NORMAL	120/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
2	CHERMAPANDI	51	MALE	48176	STAB INJURY ABDOMEN	EXPLORATIVE LAPROTOMY	CLASS IV	febrile	KLEBSILA	TACHYPNEIC	180	TACHYCARDIA	23000	76	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
3	MUTHU VEL	35	MALE	3178	STAB INJURY ABDOMEN	EXPLORATIVE LAPROTOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	6700	NORMAL	120/82	NORMAL	3	NORMAL	NORMAL LIMIT	normal	Alive
4	MANIKAM	57	MALE	45781	STAB INJURY ABDOMEN	EXPLORATIVE LAPROTOMY	CLASS IV	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	7600	NORMAL	120/83	NORMAL	2.6	NORMAL	NORMAL LIMIT	normal	Alive

S NO	NAME	AGE	SEX	IP NO	DIAGNOSIS	PROCEDURE	WOUND CLASS	TEMPERATURE	CULTURE	RR	RBS	PR	WBC	CRP	BP	RFT	PLATELETS	LFT	ABG	INR	Results
5	VEERAPANDI	45	MALE	87432	STAB INJURY ABDOMEN	EXPLORATIVE LAPROTOMY	CLASS IV	AFEBRILE	NO GROWTH	NORMAL	90	NORMAL	8000	NORMAL	120/84	NORMAL	2.8	NORMAL	NORMAL LIMIT	normal	Alive
1	GOMU	29	FEMALE	1256	SIGMOID VOLVOLUS	RESECTION ANASTAMOSIS WITH LOOP COLOSTOMY	CLASS II	AFEBRILE	NO GROWTH	NORMAL	115	NORMAL	8700	NORMAL	110/80	NORMAL	2	NORMAL	NORMAL LIMIT	normal	Alive
2	VALLI	50	FEMALE	12987	SIGMOID VOLVOLUS	DIVERSION COLOSTOMY	CLASS II	AFEBRILE	NO GROWTH	NORMAL	110	NORMAL	9000	NORMAL	120/70	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
1	KALIRAJ	47	MALE	62514	ILEOCAECAL GANGRENE	RIGHT HEMICOLECTOMY WITH ILEOTRANSVERSE ANASTAMOSIS	CLASS IV	AFEBRILE	NOGROWTH	NORMAL	110	NORMAL	9800	NORMAL	120/80	NORMAL	1.3	NORMAL	NORMAL LIMIT	normal	Alive
2	ARUMUGAKANI	43	MALE	63595	SMALL BOWEL GANGRENE	ILEAL RESECTION AND ANASTAMOSIS	CLASS IV	AFEBRILE	NO GROWTH	NORMAL	90	NORMAL	5700	NORMAL	130/70	NORMAL	1.2	NORMAL	NORMAL LIMIT	normal	Alive
3	SUBRAMANIYAN	47	MALE	37308	SMALL BOWEL GANGRENE	ILEAL RESECTION AND ANASTAMOSIS	CLASS IV	AFEBRILE	NO GROWTH	NORMAL	100	NORMAL	8000	NORMAL	120/70	NORMAL	1	NORMAL	NORMAL LIMIT	normal	Alive
4	natarajan	56	MALE	43776	SMALL BOWEL GANGRENE	ILEAL RESECTION AND ANASTAMOSIS	class iv	febrile	klebsilia	TACHYPNEIC	150	tachycardia	24000	80	110/70	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
5	NARAYANAN	20	MALE	32682	SMALL BOWEL GANGRENE	ILEAL RESECTION AND ANASTAMOSIS	CLASS IV	AFEBRILE	NO GROWTH	NORMAL	100	NORMAL	NORMAL	NORMAL	120/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
6	DHANDAPANI	40	MALE	2255	SMALL BOWEL GANGRENE	ILEAL RESECTION AND ANASTAMOSIS	CLASS IV	AFEBRILE	NO GROWTH	NORMAL	110	NORMAL	NORMAL	NORMAL	110/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
7	PRASSANA	16	MALE	3456	SMALL BOWEL GANGRENE	ILEAL RESECTION AND ANASTAMOSIS	CLASS IV	AFEBRILE	NO GROWTH	NORMAL	100	NORMAL	NORMAL	NORMAL	130/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
8	VELUMUTHAMMAL	56	FEMALE	56113	SMALL BOWEL GANGRENE	ILEAL RESECTION AND ANASTAMOSIS	CLASS IV	febrile	e.coli	TACHYPNEIC	140	tachycardia	19000	76	100/80	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
1	PETCHIYAMMAL	25	FEMALE	16340	SMALL BOWEL GANGRENE	RESECTION END TO SIDE JEJUNAL ASCENDING COLON ASTAMOSIS	CLASS IV	AFEBRILE	NO GROWTH	NORMAL	90	NORMAL	NORMAL	NORMAL	130/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
2	KAVITHA	36	FEMALE	45113	SMALL BOWEL GANGRENE	ILEAL RESECTION AND ANASTAMOSIS	CLASS IV	AFEBRILE	NO GROWTH	NORMAL	100	NORMAL	NORMAL	NORMAL	120/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
1	KRISHNASWAMY	57	MALE	67528	INTESTINAL OBSTRUCTION	DIVERSION ILIOSTOMY	CLASS III	febrile	E COLI	TACHYPNEIC	160	tachycardia	20500	70	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SEPTIC SHOCK
2	MANIKAVEL	19	MALE	9026	INTESTINAL OBSTRUCTION	BAND RELEASE	CLASS III	AFEBRILE	NO GROWTH	NORMAL	100	NORMAL	NORMAL	NORMAL	120/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
3	MUNIYANDI	55	MALE	2198	INTESTINAL OBSTRUCTION	ADHESION RELEASE	CLASS III	AFEBRILE	NO GROWTH	NORMAL	120	NORMAL	NORMAL	NORMAL	130/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
4	VELLAIAPPAN	55	MALE	49918	INTESTINAL OBSTRUCTION	ADHESION RELEASE	CLASS III	febrile	E COLI	TACHYPNEIC	170	TACHYCARDIA	19000	69	130/70	NORMAL	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
5	MUTHU	44	MALE	56090	INTESTINAL OBSTRUCTION	BAND RELEASE	CLASS III	AFEBRILE	NO GROWTH	NORMAL	120	NORMAL	NORMAL	NORMAL	110/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
6	SAWARI MUTHU	47	MALE	14766	INTESTINAL OBSTRUCTION	BAND RELEASE	CLASS III	AFEBRILE	NO GROWTH	NORMAL	115	NORMAL	NORMAL	NORMAL	100/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
7	CHELLADURAI	44	MALE	22369	INTESTINAL OBSTRUCTION	ADHESION RELEASE	CLASS III	febrile	klebsilia	TACHYPNEIC	200	tachycardia	17000	60	90/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SEPTIC SHOCK

S NO	NAME	AGE	SEX	IP NO	DIAGNOSIS	PROCEDURE	WOUND CLASS	TEMPERATURE	CULTURE	RR	RBS	PR	WBC	CRP	BP	RFT	PLATELETS	LFT	ABG	INR	Results
1	MARIAMMAL	47	FEMALE	56001	ILEAL STRICTURE	ILEAL RESECTION AND ANASTAMOSIS	CLASS III	AFEBRILE	NO GROWTH	NORMAL	120	NORMAL	NORMAL	NORMAL	120/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
2	VADIVAMMAL	67	FEMALE	23577	INTESTINAL OBSTRUCTION	BAND RELEASE	CLASS III	AFEBRILE	NO GROWTH	NORMAL	100	NORMAL	NORMAL	NORMAL	110/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
3	VEERALAKSHMI	67	FEMALE	12007	INTESTINAL OBSTRUCTION	ADHESION RELEASE	CLASS III	febrile	PROTEUS	TACHYPNEIC	236	tachycardia	21000	70	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
1	MURUGAN	55	MALE	45673	MALIGNANCY SPLENIC FLEXURE GROWTH	TRANSVERSE COLOSTOMY	CLASS III	febrile	E COLI	TACHYPNEIC	234	tachycardia	19000	60	110/80	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
2	SORIMUTHU	75	MALE	65332	ADVANCED CA RECTOSIGMOID	HARTMANN PROCEDURE	CLASS III	febrile	klebsilia	TACHYPNEIC	170	tachycardia	20800	90	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
3	KRISHNA RAO	65	MALE	12007	SPLENIC FLEXURE GROWTH	TRANSVERSE COLOSTOMY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	100	NORMAL	NORMAL	NORMAL	120/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
4	BHARATH	50	MALE	1558	DESCENDING COLON GROWTH	TRANSVERSE COLOSTOMY	CLASS III	febrile	E COLI	TACHYPNEIC	150	TACHYCARDIA	19000	75	130/80	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
5	SHANTHI	56	FEMALE	2376	CA RECTOSIGMID	TRANSVERSE COLOSTOMY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	100	NORMAL	NORMAL	NORMAL	120/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
1	PRIYADHARSHINI	32	FEMALE	42750	BLUNT INJURY LIVERLACERATION	HEPATORAPPHY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	95	NORMAL	NORMAL	NORMAL	130/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
2	GANESAN	25	MALE	35470	BLUNT INJURY LIVERLACERATION	HEPATORAPPHY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	78	NORMAL	NORMAL	NORMAL	120/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
3	KALATHIYAN	30	MALE	69631	BLUNT INJURY LIVERLACERATION	LAPROTOMY WITH ABGEL CLOSURE	CLASS III	AFEBRILE	NO GROWTH	NORMAL	110	NORMAL	NORMAL	NORMAL	130/60	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
4	RAMAIAH	50	MALE	35462	BLUNT INJURY SPLENIC LACERATION	SPLEENECTOMY	CLASS III	febrile	klebsilia	TACHYPNEIC	250	tachycardia	20500	88	80/60	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	DEATH
5	CHELLADURAI	40	MALE	13671	BLUNT INJURY ABDOMEN RETROPERITONEAL HAEMATOMA	EXPLORATIVE LAPROTOMY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	110	NORMAL	NORMAL	NORMAL	120/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
6	DHIVYA	17	FEMALE	13564	BLUNT INJURY ABDOMEN SPLENIC LACERATION	SPLEENECTOMY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	115	NORMAL	NORMAL	NORMAL	110/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
7	AYYAPPAN	33	MALE	94128	BLUNT INJURY ABDOMEN MESENTRIC TEAR	EXPLORATIVE LAPROTOMY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	120	NORMAL	NORMAL	NORMAL	130/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
8	UTCHIMAHALI	45	FEMALE	4576	BLUNT INJURY ABDOMEN	SPLEENECTOMY	CLASS III	febrile	klebsilea	tachypneic	200	tachycardia	18000	60	120/70	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
9	VELMURUGAN	35	MALE	9846	BLUNT INJURY ABDOMEN	SPLEENECTOMY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	114	NORMAL	NORMAL	NORMAL	110/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
10	MUTHU KUMAR	25	MALE	12653	BLUNT INJURY ABDOMEN	SPLEENECTOMY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	114	NORMAL	NORMAL	NORMAL	110/71	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
1	PONRAJ	78	MALE	14576	OBSTRUCTED PARAUMBILICAL HERNIA	OBSTRUCTION RELEASE WITH OMENTECTOMY	CLASS III	febrile	klebsilia	TACHYPNEIC	150	tachycardia	18000	70	120/80	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
2	RAMAKRISHNAN	71	MALE	29860	LEFT OBSTRUCTED INGUINAL HERNIA	OBSTRUCTION RELEASE WITH HERNIOPLASTY	CLASS III	AFEBRILE	NO GROWTH	NORMAL	130	NORMAL	NORMAL	NORMAL	140/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive

S NO	NAME	AGE	SEX	IP NO	DIAGNOSIS	PROCEDURE	WOUND CLASS	TEMPERATURE	CULTURE	RR	RBS	PR	WBC	CRP	BP	RFT	PLATELETS	LFT	ABG	INR	Results
3	SUBBIAH	57	MALE	31394	OBSTRUCTED RIGHT INGUINAL HERNIA	OBSTRUCTION RELEASE WITH OMENTECTOMY	CLASS III	A FEBRILE	NO GROWTH	NORMAL	140	NORMAL	NORMAL	NORMAL	130/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
4	RAMAIAH	80	MALE	38832	OBSTRUCTED RIGHT INGUINAL HERNIA	OBSTRUCTION RELEASE WITH HERNIOPLASTY WITH ORCHIDECTOMY	CLASS III	febrile	KLEBSILLA	TACHYPNEIC	170	tachycardia	17000	80	130/70	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
5	GOVINDAN	67	MALE	67278	OBSTRUCTED UNBLICAL HERNIA	OBSTRUCTION RELEASE WITH ANATOMICAL REPAIR	CLASS III	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	NORMAL	NORMAL	120/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
6	VIJAYA	45	FEMALE	45987	OBSTRUCTED UMBLICAL HERNIA	OBSTRUCTION RELEASE WITH MESH REPAIR	CLASS III	A FEBRILE	NO GROWTH	NORMAL	115	NORMAL	NORMAL	NORMAL	130/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
7	SUNDARI	55	FEMALE	34221	IRREDUCIBLE UMBLICAL HERNIA	OBSTRUCTION RELEASE WITH ANATOMICAL REPAIR	CLASS III	A FEBRILE	NO GROWTH	NORMAL	110	NORMAL	NORMAL	NORMAL	110/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
8	SUBBAMMAL	65	FEMALE	44231	STRANGULATED INCISIONAL HERNIA	OBSTRUCTION RELEASE WITH ANATOMICAL REPAIR	CLASS III	febrile	KLEBSILLA	TACHYPNEIC	150	TACHYCARDIA	13000	60	110/70	elevated	###	ELEVATED	METABOLIC ACIDOSIS	ELEVATED	SIRS
9	OVIYAR	53	FEMALE	31505	STRANGULATED INCISIONAL HERNIA	LAPROTOMY WITH RESECTION WITH ANATOMICAL REPAIR	CLASS III	A FEBRILE	NO GROWTH	NORMAL	117	NORMAL	NORMAL	NORMAL	130/70	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive
10	CHINNABARATHAM MAL	75	FEMALE	46340	OBSTRUCTED LEFT FEMORAL HERNIA	OBSTRUCTION RELEASE WITH MESH REPAIR	CLASS III	A FEBRILE	NO GROWTH	NORMAL	115	NORMAL	NORMAL	NORMAL	120/80	NORMAL	NORMAL	NORMAL	NORMAL LIMIT	normal	Alive