A STUDY ON CORRELATION OF RADIOLOGICAL INVESTIGATIONS AND RIPASA SCORE IN DIAGNOSIS OF ACUTE APPENDICITIS

Dissertation submitted to

THE TAMIL NADU DR.M.G.R MEDICAL UNIVERSITY

In partial fulfilment of the regulations

For the award of degree of

M.S. (General Surgery)

BRANCH - I



THE TAMIL NADU DR.M.G.R MEDICAL UNIVERSITY

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DECLARATION

I, Dr.VEESAR VIGNESH R, solemnly declare that this dissertation "STUDY ON CORRELATION OF RADIOLOGICAL INVESTIGATIONS AND RIPASA SCORE IN DIAGNOSIS OF ACUTE APPENDICITIS" is a bonafide work done by me in the Department of General Surgery, KAPV Government Medical College, Trichy, under the guidance of Dr.S.SRIHARI M.S., Associate professor, Department of General Surgery , KAPV government medical college, Trichy. This dissertation is submitted to the Tamil Nadu Dr. M.G.R Medical university, Chennai in partial fulfilment of the university regulations for the award of M.S. Degree (General Surgery) Branch – I, General Surgery examination to be held in May 2020

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This is to certify that this dissertation work titled "STUDY ON CORRELATION OF RADIOLOGICAL INVESTIGATIONS AND RIPASA SCORE IN DIAGNOSIS OF ACUTE APPENDICITIS" of the candidate Dr. VEESAR VIGNESH R, with registration Number 221711565 for the award of MS Degree in the branch of General Surgery I personally verified the urkund.com website for the purpose of plagiarism Check. I found that the uploaded thesis file contains from introduction to conclusion pages and result shows 22 (Twenty Two) percentage of plagiarism in the dissertation.

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INTRODUCTION

Acute appendicitis is defined as inflammation of vermiform appendix and is one of the commonest cause of abdominal pain seen in emergencies, and being the most common surgical emergencies encountered in the world particularly among the young adults and children. Life time risk of having acute appendicitis in general population is 8.6% for males and 6.7% for females.

The rate of negative appendicectomy is approximately 15% out of the total appendicectomies done in every year. The most important requisite being the Surgeon's good clinical assessment in the diagnosis of appendicitis. Several other conditions mimic signs and symptoms of acute appendicitis making the diagnosis of appendicitis clinically a challenging one.

Although acute appendicitis has typical clinical presentation in 70% of the cases, about 30% of the patients have an uncertain pre-operative diagnosis due to which there is negative laparotomy in as high as 20-25% cases.

The rate of such negative laparotomy is even higher (35- 45%) in females of childbearing age, because of the pelvic organs and complications of pregnancy in this group. Various diagnostic modalities are different scoring systems, and ultrasonography, Contrast studies, computed tomography (CT) and MRI. Out of which Only contrast enhanced computerized tomography (CECT) of abdomen can diagnose the condition with very high sensitivity and specificity but it is not feasible to have this investigation done for each patient suspected to have appendicitis, particularly in countries with limited resthisces.

No single sign, symptom or diagnostic test confirms the diagnosis of acute appendicitis accurately in every cases, and the classic history of anorexia followed by periumbilicalpain, followed by nausea, and right lower quadrant (RLQ) pain, and vomiting occurs in only 50% of cases of acute appendicitis. Appendicitis may occur for several reasons, such as an infection of the appendix, or tumours in appendix, but the most important factor is the obstruction of the appendiceal lumen.

If this condition is left untreated or even in delay in diagnosis may lead to increase in morbidity and complications like perforation, peritonitis, and has the potential for severe complications, may even cause death resulting for sepsis and MODS. On the other hand, overzealous diagnosis leads to increase in the negative appendicectomy rate. Therefore, the differential diagnosis of appendicitis is often a clinical challenge because appendicitis can mimic several abdominal conditions.

In 2010, a new scoring system was proposed by the Department of General Surgery at the Raja IsteriPengiranAnakSaleha (RIPAS) Hospital, Brunei Darussalem, which comprise 14 parameters for clinical diagnosis of acute appendicitis for asian population. The scoring system showed a sensitivity and a specificity of 97.5% and 81.8%. respectively.

The present study was therefore planned to correlate RIPASA scoring system, which is based on purely clinical and laboratory findings and radiological investigations such us ultrasound (USG) abdomen and pelvis, and contrast enhanced computer tomography (CECT) keeping in mind to effectively reduce the negative appendicectomy rate.

REVIEW OF LITERATURE

Numerous studies had been conducted to see the effectiveness of RIPASA scoring system in diagnosis of acute appendicitis in patients presenting with RIF tenderness.

- J ClinDiagnet al, The study conducted in Kasturba Medical College and Hospital, Mangalore, Karnataka, India, in November 2008 concluded that RIPASA scoring system is more convenient, accurate, and specific scoring system for Indian population with the sensitivity and specificity of RIPASA score were 96.2% and 90.5% respectively.
- Indian J Sure et al, study conducted in center government hospital Ajmer in central Rajasthan (India), in 2018, have concluded that RIPASA score is a better, easy, safe, and non-invasive diagnostic tool for diagnosis of acute appendicitis especially in the Indian scenario.
- **Mynalli, et al,** study conducted in Father Muller Hospital, Karnataka, India, concluded the addition of HRUSG to clinical assessment of acute appendicitis by RIPASA scoring system, increases the sensitivity and specificity, reduces the false positive rate (NAR), assists surgical decision making in doubtful cases to prevent complications and morbidity.

REVIEW ON APPENDIX AND ACUTE APPENDICITIS

SURGICAL ANATOMY

It is located at the terminal end of the caecum where three taeniae of large intestine join, at about 2 cm below the ileocaecal junction. Usually, around 5–10 cm in size but sometimes it can also be variable. Size of the lumen is that of thematchstick size, and the diameter of appendix is 3 to 8 mm, and diameter of lumen is 1 to 3 mm (matchstick).

Mesoappendix is extension of the mesentery contains appendicular artery, a branch of ileocolic artery. Often an accessory appendicular artery (of Seshachalam) may be present. Thrombosis of these vessels leads to gangrenous appendicitis.

Parts of appendix - Base, body and tip.

BASE - it is attached to posteromedial wall of caecum about 2 m below the ileocaecal junction. All taenia of caecum converge to the base and serve as a guide for the identification of the appendix.

BODY - is narrow, tubular and contains a canal which opens into the caecum. The caecal opening is guarded by an incomplete mucous fold called as,"THE VALVE OF GERLACH".

TIP - It is least vascular and is directed in various directions

VARIATIONS OF THE TIP OF APPENDIX:

- 1. Retrocecal, 12'O clock (65%)
- 2. Splenic, 2'O clock (1-2%), pre ideal and postileal
- 3. Promontoric, 3'O clock, towards sacrum.
- 4. Pelvic, 4'O clock (30%), downwards and medially (right uterine tube and ovary)
- 5. Mid-inguinal, 6'O clock Vertically downwards.
- 6. Parabolic, 11'O clock, appendix pass upwards or towards right.

MOST COMMON position of tip of appendix being the retrocecal position.



Different anatomical positions of the appendix.



A - APPENDIXB- MESOAPPENDIXC- CAECUMD - ILEUME- TEINEA

BLOOD SUPPLY OF APPENDIX:

 Appendicular artery, - The appendicular artery is a branch from the lower division of the ileocolic artery, runs behind the terminal ileum and enters the mesoappendix a short distance from the appendicular base. Here it gives off a recurrent branch, which anastomoses with a branch from the posterior caecal artery. The main artery approach the tip of the appendix, this one may be thrombosed in appendicitis leading to gangrene and infarction. SMA-Rt colic and ileocolic-ileiocolic gives anterior and posterior caecal-posterior caecal-appendicular. The Mesoappendix (mesentery of appendix) - is short, triangular and variable. It extends the whole length of appendix. The breadth of mesoappendix usually falls short of length of appendix. The body of appendix is kinked on itself where the free border of mesoappendix ends, hence it is coiled like worm and is named the vermiform. Appendicular vessels pass through free margin of mesoappendix.



APPENDIX WITH MESOAPPENDIX



BLOOD SUPPLY OF APPENDIX

LYMPHATICS OF APPENDIX

• They are numerous, as there is abundant lymphoid tissue in its walls. From the body and apex of the appendix 8-15 vessels ascend in the mesoappendix and are ocasionally intrupted by one or mote nodes which unite to form 3 or 4 larger vessels, which drains into inferior and superior nodes of the ileocolic chain.

INNERVATION OF APPENDIX:

Nerve supply of appendix is from sympathetic and parasympathetic nerves from the superior mesenteric plexus. Visceral afferent fibers carrying sensation of stretch and distention mediate the symptoms of "pain" felt during the initial stages of appendicular inflammation. With the other structures derived from the midgut, these sensations are poorly localized initially and referred to the central (periumblical) region of the abdomen. Localized pain occurs when parietal tissues are involved throughsomatic system.

FUNCTIONS OF APPENDIX

- Maintain homeostatic the endocrine cells present in appendix contribute to biological control mechanism.
- Immune function during the early years of development, the appendix has been shown to function as a lymphoid organ, assisting with the maturation of B lymphocytes and production of antibodies IgA.
- Provide direction to lymphocytes appendix is involved in the production of molecules that help to direct the movement of lymphocytes to various other location in the body.
- Maintaining gut flora the tube like structure of appendix helps in the proper movements of waste matter in the digestive system.
- Provide surface appendix servers a given for useful bacteria when illness flushes those bacteria from the rest of the intestine. It serve the vital function of repopulating the gut with beneficial bacteria after a diarrhoea like dysentery.

HISTOLOGY OF APPENDIX

Histologically its layers are, like that of the large intestine has a mucosa, lamina propria, submucosa and muscularis.

It has no secretory functions. It produce mucinous secretions into the lumen like rest of the gut.

Characteristic feature of appendicular tissue is its masses of aggregated lymphoid tissue and lymphocytes scattered throughout the mucosa and submucosa layers. These aggregate lymphocytes; scattered lymphocytes; and lymphoid follicles are abundantly seen in its layers.

Histology of the normal appendix -from lumen outward, its layers are the mucosa; lamina propria; submucosa;muscularis; and adventitia. There are no digestive glands or secretory ducts.

But these many organized lymphoid aggregations do suggest an immune role for the appendix. These lymphocytes may account for the profound inflammatory changes seen with acute appendicitis.

HISTOLOGY OF APPENDIX



Transverse section of appendix, showing diffusely scattered masses of lymphoid tissue throughout the lamina propria (LP); and Scattered infiltrates within the submucosa (SM);Lesser degree in the muscularis layer suggest immune function.

MC BURNEYS POINT

ANATOMY AND LOCATION :

Located 1.5-2 inches from the anterior superior spinous process of the ilium on a straight line drawn from that process to the umbilicus.

SIGNIFICANCE :

Tenderness localized over the McBurney's point is a classic sign concerning for appendicitis when properly put into the context of the rest of the clinical presentation.

INDICATION :

Patient presents with pain in the right lower quadrant Diagnosis of appendicitis is suspected

TECHNIQUE :

Start by having the patient lie supine on the exam table

Ask the patient to cough or perform the Valsalva maneuver and point to where the pain occurs

Palpate the abdomen for an area of local tenderness

DIAGNOSTIC ACCURACY:

Likelihood ratios (McGee S.; 2001)

Positive: 3.4 (95% CI 1.6, 7.2)

Negative: 0.4 (95% CI 0.2, 0.7)

CLINICAL PEARLS :

If the appendix is rupture or located in an abnormal position and/or generalized peritonitis is present, tenderness will not be in the expected location.

Pregnancy can also displace the appendix closer to the umbilicus or higher up in the right upper quadrant of the abdomen. The gestational age of the baby will influence the change in location.



ACUTE APPENDICITIS - Inflammation of appendix.

CAUSES :

Common with young males and in white races. Diet rich in Fibre prevents appendicitis, and Lessfibrediet increases risk of appendicitis. More common during May and August, therefore shows seasonal variation which often is called as epidemic appendicitis.Viral infection cause mucosaloedemaand inflammation which gets infected by bacteria causing inflammation of appendix resulting in appendicitis.Family history relevant in 30% of appendicitis in children with appendicitis especially occurring in first degree relatives. Obstruction of the lumen of appendix cause obstructive appendicitis.

Blockage occurs due to—faecoliths, stricture, foreign body, round worm or threadworm. Adhesions and kinking—carcinoma caecum near the base, ileocaecal Crohn's disease.Distal colonic obstruction. Abuse of purgatives. Faecolith is the *most common* cause.

Organisms:

E. coli [85%] - most common organisms, followed byenterococci which is 30%, others include - bacteroides, streptococci, *Cl. welchii*, *Anaerobicstreptococci*. *Pseudoappendicitis*is a type of appendicitis due to acute ileitisbyYersiniainfection which is often due to Crohn's disease.

PATHOPHYSIOLOGY

- Acute appendicitis thought to begin with obstruction of the lumen
- Obstruction can result from food matter, adhesions, or lymphoid hyperplasia
- Mucosal secretions continue to increase intra luminal pressure
- Eventually the pressure exceeds capillary perfusion pressure and venous and lymphatic drainage are obstructed.
- With vascular compromise, epithelial mucosa breaks down and bacterial invasion by bowel flora occurs.
- Increased pressure also leads to arterial stasis and tissue infarction
- End result in perforation and spillage of infected appendices contents into the peritoneum
- As inflammation continues, serosa and adjacent structures become inflamed
- This triggers somatic pain filers, innervating the peritoneal structures causing pain in the right lower quadrant.
- Change in stimulation from visceral to somatic pain filers explains the classic migration of pain in the peri umbilical area to the right lower quadrant seen with acute appendicitis.
- Exceptions exist in classic presentation due to anatomic variability of appendix
- E.g. in pregnancy, appendix can be shifted and patients can present with right upper quadrant.

TYPES

1. <u>Acute non obstructive appendicitis k/c as catarrhal, ormucosalappendicitis</u>

- Inflammation occurs inmucous membrane associated with redness,

oedema, and haemorrhages which can result in the following courses:

- Fibrosis,
- Resolution,
- Suppurations,
- Ulceration
- Recurrent appendicitis
- Gangrene.
- <u>Stumpappendicitis</u>- appendicitis in a retained long stump of appendix after following a lap appendicetomy.
- 3. <u>Recurrentappendicitis</u> Repeated attacks of non obstructive appendicitis leads to fibrosis, adhesions resulting in recurrent appendicitis.
- 4. <u>Subacuteappendicitis</u> milder form of acuteappendicitis.
- 5. <u>Acuteobstructiveappendicitis</u> Pus gets collects in the blocked lumen of appendix which gets oedematous and rapidly progresses resulting to perforation either at tip or at base of appendix, leading toperitonitis, and formation of appendicular abscess or pelvic abscess. Mostly, there will be associated thrombosis of the appendicular artery.

PATHOPHYSIOLOGY OF ACUTE APPENDICITIS

Cyclic Changes Cause Appendicitis



CLINICAL FEATURES

Typical presentations

- Dull, crampy central abdominalpain
- Malaise/ vomiting / anorexia / low grade fevers
- Pain worsens &localises to right iliac fossa (RIF) with cough / movement tenderness.

Early appendicitis

Pain :

- Location: Periumbilical (T10)
- Character: Dull
- Over time: Colicky
- Associated symptoms: Vomiting and Anorexia

LATE APPENDICITIS

Pain:

Location	:	RightIliac Fossa
Character	:	Localised
Over time	:	Constant
Aggravating	:	Going over bumps, coughing, walking
Relieving	:	Hip Flexion, staying still

Examination findings: "Peritonism"

Guarding

- rebound tenderness
- percussion tenderness

Rovsing, psoas, and other signs.

SIGNS AND SYMPTOMES AS TIME COURSE



SIGNS SPECIFIC TO APPENDICITIS

Rovsing's sign:On deep palpation in left iliac fossa, pain occurs in right iliac fossa which is due to shift of bowel loops which irritates the parietal peritoneum.

Cope's psoas test:Hyperextension of hip joint causes pain in right iliac fossa due to irritation of psoas muscle, in case of retrocaecal appendix

Obturator test: Internal rotation of right hip joint causes pain in right iliac fossa due to irritation of obturator internus muscle in case of pelvic appendix.

Baldwing's test:When legs are lifted off the bed with knee extended, the patient complains of pain while pressing over the flanks, in retrocaecalappendix

ATYPICAL SYMPTOMS

Position of appendix	Symptoms / signs
Mc Burney poini	Typical presentation, rosving sign.
Retro/paracaecal	Psoas sign / flank pain / absence of peritoneum
Retro/paraileal	Diarrhoea, crampy pain
Pelvic	Suprapubic pain, urinary frequency, pyuria.

DIFFERENTIAL DIAGNOSIS:

Many conditions mimic acute appendicitis.

It differs in children; adult; elderly, and females.

- **Perforated duodenal ulcer:** In duodenal ulcer perforation, fluid trickles down along right paracolic gutter and mimics appendicitis. Upper abdominal pain, obliterated liver dullness, gas under diaphragm in X-ray and CT scan differentiate it from acute appendicitis.
- Acute cholecystitis: Pain in right upper abdomen, fever, jaundice, upper abdominal guarding are the features of acute cholecystitis. US; HIDA scan, LFT will differentiate it from acute appendicitis.

- Acute pancreatitis: Pain in epigastrium, radiating to back, raised serum amylase and lipase, CT abdomen with a history of alcohol intake often are diagnostic.
- **Right ureteric colic:** Pain is colicky in nature which often refers to genitalia. Haematuria, urinary symptoms are common. It mimics retrocaecal/pelvic acute appendicitis. Often in ureteric stone, abdomen is soft and nontender. CT is the important way to differentiate.
- Acutetyphlitis:Inflammation of caecumis called astyphlitis. Often it is difficult to differentiate it from acute appendicitis. Intravenous/ oral metronidazole completely controls the disease.
- Acute bacterial enterocolitis: It presents with pain abdomen, diar- rhoea, toxaemia, dehydration. Often it is difficult to differentiate from acute appendicitis.
- Acute mesenteric lymphadenitis:Difficult to differentiate from acute appendicitis. It is treated conservatively. CT may be helpful to identify it. Laparoscopic evaluation is ideal.
- **Right sided acute pyelonephritis:** Here there will be pain and tenderness in loin. Urine analysis, US are diagnostic. Often DTPA scan may be needed.
- **Crohn's disease:** Presenting with acute symptoms will have similar features of acute appendicitis.

- Pelvicinflammatory disease:Salpingo-oophoritismimics acute appendicitis. Twisted/haemorrhagic/ruptured ovarian cyst/ruptured ectopic gestation/endometriosis/tubo-ovarian abscess mimics acute appendicitis. US, laparoscopy helps to differentiate it from others. Mittelschmerz is lower abdominal pain due to rupture of follicular cyst during midcycle. It subsides on its own.
- **Meckel's diverticulitis:** Presents clinically like acute appendicitis. It is not possible to differentiate between two clinically.
- Intussusception: Mimics acute appendicitis in children. ISS is common before the age of 2 years. Acute appendicitis is rare before the age of 2 years. Palpable mass, features of intestinal obstruction, barium enema X-ray, US are useful methods to differentiate.
- Worm infestation (round worm bolus/ball): It often presents as pain in right iliac fossa. Features of intestinal obstruction are common here.
- **Sigmoiddiverticulitis:** In elderly with loop lying towards right side may present as pain in the right iliac fossa.
- **Carcinoma caecum:** May present with features of acute appendicitis without any earlier typical features.
- Rupturedaorticaneurysm,
- Acuteintestinalobstruction,
- Mesentericischaemia,

- Rare conditions like,Pre Dherpetic pain of the right 10th and 11th dorsal nerves may mimic acute appendicitis. Guarding and rigidity will not be present. There will be significant hyperaesthesia.
- Tabetic crisis,
- Tuberculosis of spine, secondaries in spine, multiple myeloma, osteoporotic pain often can mimic acute appendicitis.
- Acute crisis of porphyria and diabetes mellitus mimic acute appendicitis with severe abdominal pain.
- Right-sided lobar pneumonia and pleurisy are often not easy to differentiate from acute appendicitis. Pleural rub, change in breath sounds, chest X-ray can identify pneumonia.
- Testicular torsion/acute severe orchitis often look like acute appendicitis. Referred pain in iliac fossa, and if scrotum is not palpated clinically these conditions are mistaken for acute appendicitis. These problems are much more obvious if testis is undescended one.

INVESTIGATIONS

- Total WBC count will beraised.
- USG abdomen done torule out other conditions like ureteric stone, orovariancyst, or ectopic pregnancy, also very useful to confirm appendicular mass /abscess.
- Laparoscopy- the most useful method used now a days.

USG ABDOMEN AND PELVIS

USG criteria for appendicitis- shows 85% Specificity - the following are the features,

- Noncompressible,
- Appendix-size> 6 mm AnterioPosteriordiameter,
- Hyperechoic thickened appendix wall of size> 2 mm, also called as target sign,
- Appendicolith,
- SubmucosalcontinuityInterruption,
- Periappendicularfluid collection.

USG FINDINGS OF APPENDICITIS



Contrast CT scan:

Very useful, when diagnosis is difficult particularly in old patients. Dilated appendix, nonfilling of the lumen by contrast, dilated lumen, periappendicular fluid collection, thickened wall, or presence of mass /abscess / associated pathology like carcinoma can be identified.

Has 95% sensitivity and specificity of 95% accuracy. Fat thickened mesoappendix, or, appendicularfaecolith, appendicular phlegmon, and thickened caecum with funneling contrast into the orifice of the appendix also called as arrowhead sign - are features in CT scan.

CT Protocol for with and without imaging of the appendix

Thin slices are made from the top of the diaphragm through the ischial tuberosities.

- Scan is acquired at 2.5 X 2.5 mm slices.
- Can be reconstructed at 1.25 X 1.25 mm or 0.625 X 0.625 mm through the appendix.
- Without contrast when risk of perforation is suspected.
- With contrast for thin patients or when perforation is not highly suspected.

CT ABDOMEN AND PELVIS



CECT ABDOME SHOWING SWOLLEN APPENDIX DUE TO ACUTE APPENDICITIS.


Plain X-ray abdomen: all following features are only suggestive of appendicitis,

Lumbar scoliosis towards right occurs - due to psoas spasm, or faecolith on the right side; ileus in caecum and terminal ileum, in retrocaecalappendicitis - obliteration of preperitoneal fat line, gas in appendix, air under diaphragm (very rare), soft tissue mass in mass or abscess of appendix, intestinal obstruction (rare).

X-rayhas a main role to rule out duodenal perforation, obstruction, ureteric stone.

MRI has a role in diagnosis of appendicitis in caseof pregnancy. Moreover investigation of choice for diagnosis of doubtful acute appendicitis is MRI in pregnancy

C-reactive protein :Increases in acute phase of disease, though it is nonspecific.

99mTc HMPAO labeledleukocyte:does not have much role, but can give guidance in deciding the management.

SCORING SYSTEMS :different scoring systems has been proposed in diagnosing acute appendicitis clinically, they are..

Alvarado scoring system - 1986, Kalam modified Alvarado scoring system - 1994,RIPASA scoring system - 2010, Anderson scoring system, Tzanakis scoring system -2005

MOST COMMONLY used system is Alvarado / modified Alvarado scoring.

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X-RAY ABDOMEN SHOWING A CALCIFIED APPENDIX



MRI ABDOMEN SHOWING AN INFLAMMED APPENDIX

ALVARADO SCORING FOR APPENDICITIS - 1986	SCORE
MIGATORY PAIN	1
ANOREXIA	1
NAUSEA AND VOMITING	1
TENDERNESS IN RIGHT ILIAC FOSSA	2
REBOUND TENDERNESS	1
ELEVATED TEMPERATURE	1
LEUCOCYTOSIS, COUNT MORE THAN 10,000	2
SHIFT TO LEFT WITH NEUTROPHILIA IN PERIPHERAL SMEAR	1
TOTAL SCORE	10
SCORE < 5	RULLED OUT ACUTE APPENDICITIS
SCORE 5 - 6	DOUT FULL - FURTHER EVALUATION NEEDED
SCORE 6 - 9	PROBABLE DIAGNOSIS OF ACUTE APPENDICITIS
SCORE > 9	CONFIRMED DIAGNOSIS

TREATMENT



- **Gridironincision**Placed 1. perpendicular to the right spinoumbilical line at the McBurney's point.
- 2. RutherfordMorison'smusclecutting incision - only the Muscles are cut upwards and laterally.
- Lanzincision cosmetically better. 3.
- 4. Right lower paramedian incision/lower **midlineincision**in doubt, or when there is peritonitis.
- Fowler-WeirCutting muscle 5. medially the over rectus.

- - 2. Has a wide learning curve.



TYPES OF SKIN INCISION FOR OPEN APPENDICECTOMY



APPENDICECTOMY - ON TABLE

OPEN APPENDICECTOMY

PROCEDURE

- Under general anaesthesia OR spinal anaesthesia depending on clinical conditions,
- Skinincision is made, as described above.
- Two superficial fascia, namely outer campers and inner scarpa, are cut along the line of skin incision.
- External oblique aponeurosisisincised along the line of incision.
- Internal oblique and transverse muscles are divided using cautery in the line of thefibres.
- Peritoneum is grasped and opened in the line of theincision.
- Caecum- identified by taeniae and ileo-caecal junction.
- Omentumif found adherent is separated with care.
- Appendix held and lifted and taken out through the wound with Babcock's forceps.
- Mesoappendix with appendicular artery is ligated with vicryl.
- Using thread or silk, a purse string suture is placed around the base of the appendix.

- Base of the appendix has to be crushed with artery forceps and transfixed using vicryl (absorbable).
- Appendix is cut distal to the suture ligature and removed.
- Stump is cleaned with antiseptics.
- Purse string suture is tightened so as to bury the stump.
- Wound closed in layers and achieving complete homeostasis.
- In difficult cases Retrograde appendicectomycan be done.
- In case of appendicular abscess or perforated appendix, the peritoneal cavity is washed and drained.

STEPS OF OPEN APPENDECTOMY



LAPAROSCOPIC APPENDICECTOMY

- This is newer, popular and ideal method of appendicectomy.
- It has become gold standard method of treatment.

PROCEDURE

- Procedure is done under general anaesthesia.
- Head down position with right tilt is needed.
- Surgeon and camera man stands on the eft side.
- Scrub nurse on the right side.
- Monitor is kept on the foot end right side.
- 10mmcameraportis placed at the umbilicus.
- Working ports are two 5 mm, one on each side of lower abdomen or one on left side and another on the lower midline.
- One of the working ports can be 10 mm in difficult appendectomies.
- Pneumoperitoneum is created using CO₂.
- Appendix is held with grasper or Babcock's forceps.
- Mesoappendix is cauterised by bipolar or unipolar cautery.
- Appendix is dissected up to the base of the appendix.
- Base of the appendix is ligated with loop ligature.
- Intracorporeal ligature also can be placed using vicryl 2 zero suture material.

- Appendix is removed through 10 mm working port along with reducer.
- Often retrieval bag can be used to remove the appendix.
- Umbilical port is closed in two layers.
- Other ports are closed by skin sutures. If gangrenous or burst appendix drain can be placed through one of the ports.
- Oral food is started in 12 hours

DIFFERENT PORT PLACEMENT FOR LAPAROSCOPIC APPENDICECTOMY



ADVANTAGES

- Diagnosis is confirmed.
- Other parts of the abdomen are visualised.
- In females pelvic structures are assessed properly.
- Trauma of access is less.
- Faster recovery.
- Laparoscopic appendicectomy is definitely better whenever there is vague abdominal pain; atypical pain; situs inversus; in women; sub-hepatic appendix and as interval appendicectomy.

DISADVANTAGES

- Technical difficulties especially in burst appendix.
- Cost factor and availability.

COMPLICATIONS

- Injury to bowel, vessels while passing the ports.
- Complications of pneumoperitoneum.
- Accidental cautery injury to bowel, vessels and other vital structures.
- Bleeding.
- Bowel perforation, peritonitis.
- Ligature slipping, leak, peritonitis, fistula formation.

TROUBLES IN APPENDICECTOMY

- During surgery if appendix is found normal,other cause for symptoms should always be looked for like Meckel's diverticulum, Crohn's disease, ovarian/pelvic causes in females, malignancy, etc.
- Appendicular tumour may be found. If it is in the tip, appendicectomy is sufficient. It could be carcinoid tumour. If it is in the base right hemicolectomy is done.
- Absence of appendix—a rare occasion can occur. Caecum and taeniae should be traced properly before finalising it.
- Appendicular abscess/pelvic abscess formation.
- Malignancy in the caecum is identified on table, righthemicolectomy should be done.
- If Crohn's disease is identified during surgery, appendicectomycan be done with care, if base of the appendix is normal. But in rare occasion where appendix is involved by Crohn's disease, appendicectomy should not be done but treated only with antibiotics and steroids, otherwise fistula can develop.

INCIDENTAL APPENDICECTOMY

- Here removal of normal appendix is done at laparotomy for other conditions,
 e.g. hysterectomy.
- It is done in vague lower abdominal pain of doubtful severity.
- It is a useful procedure to tackle 'Munchausen syndrome, i.e. the patient is always worried of pain abdomen and gets relieved after the procedure (psychological benefit).
- Baron Hieronymus Munchausen (1797) was a German officer who fought with Russians against Turks and returned to tell tall stories. Patient presents with various stories of pain, bleeding, earlier medical or surgical therapies.
- It is done along with Ladd's procedure for malrotation.
- It is also done during on table colonic lavage (Doodleys lavage).
- It is not done in Crohn's disease (during acute phase), post-radiation, immunosuppression, aortoiliac grafts.

COMPLICATIONS OF APPENDICITIS

APPENDICULAR MASS

- It is the localisation of infection occurring 3 to 5days after an attack of acute appendicitis. Inflamed appendix, greater omentum, oedematous caecum, parietal peritoneum and dilated ileum (ileus) forms a mass in the right iliac fossa.
- This mass is tender, smooth, firm, well localised, not moving with respiration, not mobile, all borders well made out (well localised) and resonant on percussion. Patient may have fever and features of toxicity.
- Conservative (**Ochsner-Sherren Regimen**), as nature has already localised the infection, if now disturbed will cause faecal fistula. Includes observation:
- 1. Temp, BP, pulse chart.
- 2. Marking the mass to identify the progression/regression.
- 3. Antibiotics (ampicillin, metronidazole, gentamicin, or other drugs given depending on severity and requirement).
- 4. IV fluids.
- 5. Analgesics.
- 6. Initial nasogastric aspiration.
- Patient usually shows response by 48 to 72 hours and mass reduces in size, temperature and pulse becomes normal. Appetite is regained.
- 8. 90% of patients respond to conservative therapy. Patient is discharged and advised to come for interval appendicectomy after 6 weeks.

APPENDICULAR ABSCESS :

- It occurs due to suppuration in an acute appendicitis or suppuration in an already formed appendicular mass.
- Abscess commonly occurs in retro caecal region but often can occur in subcaecal, preileal lumbar or postileal regions.
- Pelvic abscess is also common after an attack of acute appendicitis.
- High fever, features of toxicity, tender, smooth, dull (to percuss), soft swelling in right iliac fossa which lies towards right lateral and lower side with clear upper margin but indistinct lower margin.
- Ultrasound confirms the diagnosis.
- Antibiotics are started.
- CT-guided aspiration or catheter drainage is done often as initial therapy.
- Under G/A, incision is made in the lower lateral aspect of the swelling above the inguinal ligament. Skin, external oblique muscle is cut.
- Abscess cavity is opened and pus is drained extraperitoneally, which is sent for culture and sensitivity. Wound is closed. A drain is placed through a separate incision.
- Antibiotics are continued.
- Interval appendicectomy is done after 3 months.
- Pelvic abscess is drained per-rectally or through posterior colpotomy (in females).



CT ABDOMEN SHOWING APPENDICULAR ABSCESS



CT GUIDED PIGTAIL DRAINAGE OF APPENDICULAR ABSCESS

FAECAL FISTULA

- It can occur when appendicectomy is done in gangrenous / perforated / friable base appendix.
- It can occur after drainage of appendicular abscess.
- It can occur if appendicectomy is done/attempted inappendicular mass.
- If there is underlying additional pathology like Crohn's disease/ carcinoma/ileocaecal tuberculosis/actinomycosis during appendicectomy, fistula can occur.
- Faeculent, foul smelling discharge from either main wound or drain site
- Features of infection.
- Skin excoriation.
- Features suggestive of cause.
- CT fistulogram to delineate the track. CT scan abdomen to find out the other pathology. Other relevant investigations, Hb%, albumin level, etc.
- Conservative—antibiotics, IV fluids, dressing, zinc oxide cream over the skin, observation.
- Most of the time fistula subsides provided there is no distal obstruction by adhesions or kinking or specific causes like carcinoma or tuberculosis.

MUCOCELE OF APPENDIX

- It can be neoplastic or non-neoplastic.
- It occurs when proximal end of the lumen of appendix gets slowly and completely occluded, usually by a fibrous stricture causing collection of sterile fluid (mucus) in the lumen.
- It is a retention cyst.
- Appendix is grossly enlarged with features of sub-acute appendicitis.
- Mucocele can get infected leading to empyema of appendix.
- Rupture of mucocele can lead to pseudomyxoma peritonei.
- Neoplastic type causes generalised pseudomyxoma peritonei; nonneoplastic type causes localised pseudomyxoma peritonei. (Other cause for pseudomyxoma peritonei is ruptured mucinous carcinoma of ovary).
- Often mucocele of appendix is also caused by a mucus secreting adenocarcinoma and if it is so right hemicolectomy is done.
- Clinical features: Colicky pain in right iliac fossa, Tenderness in the right iliac fossa.
- Investigations: Ultrasound abdomen.
- Treatment: Appendicectomy.

NEOPLASM OF APPENDIX

- It is rare.
- It is often post appendicectomy histological diagnosis.

Cystic neoplasms of appendix:

- Simple cyst (non-neoplastic mucocele); mucinous cystadenoma; mucinous cystadenocarcinoma (most common form of cystic neoplasms); pseudomyxoma peritonei.
- Simple cyst is non-neoplastic obstruction of the lumen and is less than 2 cm in size which contains mucin.
- Mucinous cystadenoma attains progressively large size of up to 8 cm with CT showing calcification of the wall.
- Laparoscopic appendicectomy is not used in mucinous cystadenoma.
- Hemicolectomy is done in mucinous cystadenocarcinoma and cystadenoma of large size and if base is involved.

<u>Carcinoid tumour:</u>

- It is the most common type.
- It is less aggressive.
- It is often incidentally found.
- It is arising from Kulchitsky cells in crypts of Lieberkuhn (argentaffin tissue).
- It is ten times more common than other types (One in 400 appendices).
- Commonly its location is in the tip.

- 75% are less than 1 cm; 15% are 1–2 cm; 10% are > 2 cm in size.
- It stains chromograninBimmunohisto- chemically.
- Distant and nodal spread occurs if tumour is more than 2 cm.
- Carcinoid of appendix may be goblet cell type or clas- sical type histologically.
- Goblet cell has got more mortality than classic type.
- Treatment is appendicectomy. Right hemicolectomy is done if base is involved or size is more than 2 cm or nodes are involved. 5-year survival is 90%.

Primary adenocarcinoma:

- It can be mucinous (common) or colonic (less common) type.
- Acute presentation as appendicitis is common in colonic type.
- It is staged as Duke's staging A, B, C and D.
- 5-year survival rate for each is 100%; 65%; 50% and 5% respectively.
- Mucinous type has got better prognosis. 5-year survival for mucinous type is 70% and colonic type is 40%.
- Mucinous type can rupture into the peritoneal cavity and can cause pseudomyxoma peritonei.





PSEUDOMYXOMA PERITONEI

RIPASA APPENDICITIS SCORE

Raja Isteri Pengiran Anak Saleha Appendicitis

RIPASA score developed in Raja Isteri Pengiran Anak Saleha (RIPAS), Hospital, Brunei, Darusalem.(2010)

Acute appendicitis is one of the most commonly encountered surgical emergencies, especially by junior doctors on call, with emergency appendicectomy making up 10% of all emergency abdominal surgeries. Several scoring systems, such as the Alvarado and modified Alvarado scoring system, have been introduced since 1986 to help with the clinical decision making process in achieving and accurate diagnosis of acute appendicitis in the fastest and cheapest way. However, these two scoring systems were created in the west and when applied in different environments, such as the Middle East and Asia, the sensitivity and specificity levels achieved were very low.

The new appendicitis scoring system described in this study and referred to as the RIPAS appendicitis score, or 'RIPASA' score in short, is promising and has good sensitivity, specificity and diagnostic accuracy. It is simple and easy to use, and has been specifically developed for our local patient group, which is reflective of south east asian region in terms of diet and ethnic origin.

RIPASA SCORE

SOCRING PARAMETERS	SCORE
MALE	1
FEMALE	0.5
AGE < 39	1
AGE > 40	0.5
RIF PAIN	0.5
MIGRATORY PAIN	0.5
ANOREXIA	1
NAUSEA AND VOMITING	1
DURATION OF SYMPTOMS < 48 HRS	1
DURATION OF SYMPTOMS > 48 HRS	0.5
RIF TENDERNESS	1
RIF GUARDING	2
REBOUND TENDERNESS	1
ROVSING SIGN	2
FEVER	1
RAISED WBC	1
NEGATIVE URIN ALANYSIS	1
FOREIGN NRIC	1
TOTAL	17.5
< 5.0	PROBABILITY OF ACUTE APPENDICITIS IS UNLIKELY
5.0 - 7.0	LOW PROBABILITY OF ACUTE APPENDICITIS
7.5 - 11.5	PROBABILITY OF ACUTE APPENDICITIS IS HIGH
> 12	DEFINITE ACUTE APPENDICITIS

AIM & OBJECTIVES

• CORRELATION OF RADIOLOGICAL INVESTIGATIONS AND RIPASA SCORE IN DIAGNOSIS OF ACUTE APPENDICITIS

METHODS AND MATERIAL

COLLABORATING DEPARTMEN	T :	None
PERIOD OF STUDY	:	2 year (Oct 2017 to Sep 2019)
DESIGN OF STUDY	:	Prospective observation Study

SELECTION OF STUDY SUBJECTS

All patients satisfying inclusion criteria admitted in General Surgery Department, Mahatma Gandhi hospital, for a period of 2 year

DATA COLLECTION

RIPASA score, USG abdomen and pelvis and Contrast enhanced Computer topography are done to all patients undergoing Emergency open appendectomy under regional or general anaesthesia in general surgery department, satisfying eligibility criteria.

METHODS	:	Prospective Observation Study
ETHICAL CLEARANCE	:	Approval obtained.
CONSENT	:	Individual written and Informed consent
ANALYSIS	:	Statistical Analysis
CONFLICT OF INTEREST	:	None
FINANCIAL SUPPORT	:	Nil From The Institution
PARTICIPANTS	:	Patients from Casualty and OPD

RESEARCH PROPOSAL

ELIFIBLITY CRITERIA -

Inclusion Criteria

1. All patients undergoing open appendicectomy in department of general surgery in MGM Gh, Trichy.

Exclusion criteria

- 1. Pregnant womens
- 2. Patients < 18 years of age
- 3. History of appendicectomy
- 4. Appendicular mass or any history of inflammatory pelvic disease.

METHODOLOGY

MATERIALS AND METHODS

SOURCE OF DATA

All patients satisfying inclusion criteria admitted in General surgery department, MGM Government hospital for a period of 2 year.

METHOD OF COLLECTION OF DATA:

RIPASA score, USG abdomen and pelvis and Contrast enhanced Computer topography are done to all patients undergoing Emergency open appendectomy under regional or general anaesthesia in general surgery department coming under eligibility criteria.

DATA ANALYSIS

Using statistical analysis

RIPASA SCORE

SOCRING PARAMETERS	SCORE
MALE	1
FEMALE	0.5
AGE < 39	1
AGE > 40	0.5
RIF PAIN	0.5
MIGRATORY PAIN	0.5
ANOREXIA	1
NAUSEA AND VOMITING	1
DURATION OF SYMPTOMS < 48 HRS	1
DURATION OF SYMPTOMS > 48 HRS	0.5
RIF TENDERNESS	1
RIF GUARDING	2
REBOUND TENDERNESS	1
ROVSING SIGN	2
FEVER	1
RAISED WBC	1
NEGATIVE URIN ALANYSIS	1
FOREIGN NRIC	1
TOTAL	17.5
< 5.0	PROBABILITY OF ACUTE APPENDICITIS IS UNLIKELY
5.0 - 7.0	LOW PROBABILITY OF ACUTE APPENDICITIS
7.5 - 11.5	PROBABILITY OF ACUTE APPENDICITIS IS HIGH
> 12	DEFINITE ACUTE APPENDICITIS

OBSERVATION AND RESULTS

STATISTICAL ANALYSIS

In the study 200 patients who underwent open appendectomy in Mahatma Gandhi Memorial government hospital, Trichy, patients were assessed with RIPASA score, and USG abdomen and pelvis, and CECT abdomen and finally compared with postoperative Histopathology reports.

The following reports were obtained,

AGE DISTRIBUTION :

Majority of the patients were in the age group of 21 - 30 age of years (71.5%) Around 22.0% were between 31 - 40 years of age. Only 6.5 % were found between 18 - 20 years of age.

AGE DISTRIBUTION

AGE GROUP	FREQUENCY	PERCENT
< 20	13	6.5%
21 - 30	143	71.5%
31 - 40	44	22%
TOTAL	200	100%



SEX DISTRIBUTION

Among 200 patients studied, 132 (66~%) were male and 68~(34 %) were female.

GENDER	FREQUENCY	PERCENT
MALE	132	66%
FEMALE	68	34%
TOTAL	200	100%



ANALYSIS OF RIPASA SCORE VS HPE REPORT

Among 200 patients studies, 179 (89.5%) patients has a RIPASA score

>7.5, and 21 (10.5 %) patients had a score <7.5.

RIPASA SCORE	FREQUENCY	PERCENT	
> 7.5	179	89.5%	
< 7.5	21	10.5%	
TOTAL	200	100%	



-		HPE REPORT		Total	Dyalua	
		Yes	No	Total	r value	
RIPASA SCORE		Count	175	4	179	
	>7.5	% within RIPASA SCORE	97.8%	2.2%	100.0%	
	<7.5	Count	10	11	21	0.18
		% within RIPASA SCORE	47.6%	52.4%	100.0%	0.10
		Count	185	15	200	
Total		% within RIPASA SCORE	92.5%	7.5%	100.0%	



When applied RIPASA score for the patients who underwent open appendectomy, the sensitivity, specificity, positive predictive value and negative predictive value, accuracy were, 94.59%, 73.33 %, 97.77%, 52.38% and 93% respectively.

		HPE REPORT		Total	D volue
		Yes	No	Total	I value
RIPASA SCORE	>7.5	175	4	179	
	<7.5	10	11	21	0.180
Total		185	15	200	
Sensitivity	Specificity	PPV	NPV	Accuracy	
94.59%	73.33%	97.77%	52.38%	93.00%	

ANALYSIS OF USG ABDOMEN VS HPE REPORT

Among 200 patients studied, 148 (74%) patients were positive for acute appendicitis and about 52 (26%) patients were negative for acute appendicitis on use abdomen and pelvis.

USG ABDOMEN	FREQUENCY	PERCENT
POSITIVE FOR APPENDICITIS	148	74%
NEGATIVE FOR APPENDICITIS	52	26%
TOTAL	200	100%



		HPE REPORT		Total	D voluo	
		Yes	No	Total	r value	
V		Count	140	8	148	
USC	Tes	% within USG	94.6%	5.4%	100.0%	
	No	Count	45	7	52	<0.0001
No		% within USG	86.5%	13.5%	100.0%	<0.0001
Total		Count	185	15	200	
10	nai	% within USG	92.5%	7.5%	100.0%	


Sensitivity, specificity, positive predictive value and negative predictive value and accuracy for USG abdomen and pelvis for diagnosis of acute appendicitis is, 75.68%, 46.67%, 94.59%, 13.46% and 73.50% respectively.

		HPE R	EPORT	Total	P value
		Yes	No	Total	I value
USC	Yes	140	8	148	
030	No 45 7		52	< 0.0001	
Total		185	15	200	
Sensitivity	Specificity	PPV	NPV	Accuracy	
75.68%	46.67%	94.59% 13.46%		73.50%	

ANALYSIS OF CECT ABDOMEN VS HPE REPORT

Among 200 patients studies, 182 (91%) patients were diagnosed with acute appendicitis by CECT abdomen and 18 (9%) patients were ruled out appendicitis by CECT.

CECT ABDOMEN	FREQUENCY	PERCENT
ACUTE APPENDICITIS	182	91%
NEGATIVE FOR APPENDICITIS	18	9%
TOTAL	200	100%



				HPE RI	EPORT	Total	P value
				Yes	No	10141	r value
OF OF	Vac	Count	180	2	182		
	ies	% within	CECT	98.9%	1.1%	100.0%	
CECI	N	Count		5	13	18	0.453
	INO	% within	CECT	27.8%	72.2%	100.0%	
То	tol	Count		185	15	200	
10	nai	% within	CECT	92.5%	7.5%	100.0%	



Sensitivity, specificity, positive predictive value and negative predictive value and accuracy for CECT abdomen and pelvis for diagnosis of acute appendicitis is, 97.30%, 86.67%, 98.90%, 72.22% and 96.50% respectively.

		HPE R	EPORT	Total	D volue	
		Yes	No	Total	rvalue	
CECT	Yes	180	2	182		
CECI	No	5	13	18	0.453	
Total		185	15	200		
Sensitivity	Specificity	PPV	NPV	Accuracy		
97.30%	86.67%	98.90%	72.22%	96.50%		

RIPASA VS USG ABDOMEN

For all cases, RIPASA score and USG abdomen results were derived and calculated, and these results were compared in terms of sensitivity, specificity, NPV, PPV and accuracy. The following were the results,

		US	SG	Total	P value	
		Yes	No	Total	I value	
RIPASA SCORE	>7.5	138	41	179		
KII ASA SCORE	<7.5	10	11	21	< 0.0001	
Total		148	52	200		



			US	SG	Total	P voluo
			Yes	No	Totai	r value
RIPASA		Count	138	41	179	
	>7.5	% within RIPASA SCORE	77.1%	22.9%	100.0%	
SCORE		Count	10	11	21	0.0001
	<1.5	% within RIPASA SCORE	47.6%	52.4%	100.0%	<0.0001
		Count	148	52	200	
10	otal	% within RIPASA SCORE	74.0%	26.0%	100.0%	

Out of 200 patients studied, sensitivity, specificity and accuracy for diagnosing Acute Appendicitis were 94.59%, 73.33% and 93% respectively, for RIPASA score and 75.68%, 46.67% and 73.50% respectively, for USG Abdomen, With p value - < 0.0001.

RIPASA SCORE VS CECT ABDOMEN

For all cases, RIPASA score and CECT abdomen results were derived and calculated, and these results were compared in terms of sensitivity, specificity, NPV, PPV and accuracy. The following were the results,

		CE	СТ	Total	P value	
		Yes	No	10141	i vuide	
	>7.5	175	4	179		
KIFASA SCORE	<7.5	7	14	21	0.549	
Total		182	18	200		



Out of 200 patients studied, sensitivity, specificity and accuracy for diagnosing Acute Appendicitis were 94.59%, 73.33% and 93% respectively, for RIPASA score and 97.30%, 86.67% and 96.50% respectively, for CECT Abdomen, With p value - 0.453.

				CECT	Tatal	P value	
			Yes	No	Total	i value	
RIPASA		Count	175	4	179		
	>7.5	% within RIPASA SCORE	97.8%	2.2%	100.0%		
SCORE		Count	7	14	21		
	<7.5	% within RIPASA SCORE	33.3%	66.7%	100.0%	0.549	
		Count	182	18	200		
Tot	al	% within RIPASA SCORE	91.0%	9.0%	100.0%		

DISCUSSION

In the current study of adults, with abdominal pain, who underwent open appendicectomy, with cutoff values of 7.5 for RIPASA score, and USG abdomen criteria yielded sensitivity, specificity, and accuracy of 94.59%, 73.33% and 93% (RIPASA) and 75.68%, 46.67% and 73.50% (USG abdomen), respectively, for diagnosing Acute Appendicitis.

The RIPASA score had a significantly higher diagnostic accuracy compared with USG Abdomen in the current study for diagnosing Acute Appendicitis. The RIPASA score contains parameters such as age and sex, which could increase the accuracy, and the RIPASA score also contains more parameters that could aid with the differential diagnosis of AA.

All 14 parameters of the RIPASA score are easily obtained from good clinical histories, examinations and investigations, and RIPASA score is easy to implement without additional costs compared with USG abdomen, therefore the RIPASA score may be more appropriate for the diagnosis of AA.

Computed tomography is thought to be important in the diagnosis and differential diagnosis of Acute Appendicitis, however, no studies to date directly compare the RIPASA score with CT in the diagnosis of AA.

In the current study, the sensitivity, specificity and accuracy of CECT were significantly higher than those of the RIPASA score for diagnosing Acute Appendicitis. There were statistically significant differences in diagnostic accuracy, sensitivity and specificity between MSCT and RIPASA score, indicating that MSCT is an important supplement to RIPASA score.

This may be because the RIPASA score lacks highly specific parameters, and in many other diseases (including inflammation of the caecum and/or ascending colon, gastrointestinal perforation, and right ureter calculus), a few abnormal parameters that are included in the RIPASA score often develop.

RESULTS

The current study suggests that CECT is the optimum diagnostic tool for Acute Appendicitis with sensitivity, specificity and accuracy of 97.30%, 86.67% and 96.50% respectively, followed by RIPASA with sensitivity, specificity and accuracy of94.59%, 73.33% and 93% respectively. USG Abdomen has sensitivity, specificity and accuracy75.68%, 46.67% and 73.50% respectively, showing the effectiveness of RIPASA score and CECT over USG abdomen in diagnosing acute appendicitis.

P value on comparing RIPASA vs USG abdomen shows a statistical significance of < 0.0001, showing effectiveness of RIPASA score.

P value on comparing RIPASA vs CECT abdomen shows no statistical significance, i.e P value – 0.549, and showing effectivenss of CECT over RIPASA socre.

CONCLUSION

In conclusion, the current study suggests that CECT is the optimum diagnostic tool for Acute Appendicitis compared with RIPASA and USG abdomen.

The study also showed that the RIPASA, an easy and a bedside scoring system, may be a superior diagnostic scoring system compared with the USG abdomen for Acute Appendicitis, which is important in hospitals where CECT scans or 24*7 Reporting radiologist are not readily available.

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PROFORMA

Name	:
Age	:
Sex	:
Occupation	:
Address	:
Phone No	:
I.P. No	:
Unit	:
D.O.A	:
D.O.S	:
D.O.D	:

CHIEF COMPLAINTS

PAST HISTORY:-

- 1) History of similar complaints
- 2) Treatment taken
- 3) History of Drug intake

4) History suggestive of Hypertension / Diabetes / Tuberculosis / heart disease /jaundice / thyroid disorder.

PERSONAL HISTORY:-

Diet : Vegetarian / Mixed

Habits : Smoking / Alcohol / Tobacco Bowel habits

Bladder Sleep

FAMILY HISTORY:-

Relevant / Not

MENSTRUAL HISTORY:-

Amenorrhoea / menorrhagia Regular / Not

Duration

Associated / Not with pain L.M.P.

GENERAL PHYSICAL EXAMINATION : -

- 1. General survey
- 2. Body build and nourishment
- 3. Appearance
- 4. Attitude : Restless / Quiet
- 5. Dehydration : Mild/ Moderate / Severe / Nil
- 6. Anaemia / Jaundice / Clubbing Cyanosis / Lymphadenopathy / Pedal oedema.
- 7. Eye signs
- 8. Skin Changes
- 9. Pulse
- 10. Temperature
- 11. Respiratory rate
- 12. Blood pressure

SYSTEMIC EXAMINATION

- Cardiovascular system
- Respiratory System
- Central nervous system
- Genito urinary system
- Abdomen

INVESTIGATIONS:-

- 1. Blood : Hb%
- 2. TLC
- 3. DLC
- 4. BT
- 6. ESR
- 7. Blood group and rh type.
- 8. Urine : Albumin / Sugar / Microscopy
- 9. Blood : sugar / Urea / creatinine 10.ECG
- 11.USG abdomen and pelvis
- 12.CECT Abdomen/pelvis

14.HPE

15.HIV

16.HbsAg

17.Others

DIAGNOSIS

MANAGEMENT

SURGICAL MANAGEMENT

Pre operative instructions

Type of Anaesthesia

Post - operative instructions

Post - operative period/Post - operative complication management

S. NO	NAME	AGE/ SEX	IP NO	WARD	INC/OCC	DIAGNOSIS	PROCEDURE	ANAESTHESIA	RIPASA SCORE	USG	CECT	HPE REPORT
1	EZHILARASI	32/F	44573	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
2	MARIMUTHU	33/M	44603	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
3	VEERAMALAI	21/M	44658	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
4	ANISH	20/M	44520	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6	ACUTE APPENDICITIS	NORMAL STUDY	INFLAMMED APPENDIX
5	AMBIKA	25/F	44106	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
6	SARATHA	27/F	1790659	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	8.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
7	SEKAR	24/M	44041	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
8	THIYAGARAJAN	30/M	44105	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
9	RAJALINGAM	31/M	42997	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
10	ARONE	34/M	1804682	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
11	DURAISAMY	25/M	44309	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
12	PRIYA	22/F	42052	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.5	WALL THICKENING, RIF PROBE TENDERNESS, ?ACUTE APPENDICITIS	NORMAL STUDY	NORMAL APPENDIX
13	VIJAYASHANTHI	20/M	42139	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	7	MESENTERIC ADENITIS	ACUTE APPENDICITIS	INFLAMMED APPENDIX
14	RAMAN	22/M	45440	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
15	SELVARANI	40/F	18032	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6	RIF PROBE TENDERNESS + , APERISTALTIC NON COMPRESSIBLE APPENDIX, ACUTE APPENDICITIS	NORMAL STUDY	NORMAL APPENDIX
16	DHAVAMANI	29/F	46744	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	13	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
17	CHANDRASEKAR	30/M	45139	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
18	VENKATESAN PERIYASAMY	33/M	44959	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	7	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
19	NAGARAJ	30/M	97285	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	7	ACUTE APPENDICITIS	NORMAL STUDY	INFLAMMED APPENDIX
20	KANDHAVEL	33/M	45216	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX

21	RAMADAS	27/M	44304	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
22	NALLUSAMY	22/M	45931	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
23	SELVARAJ	33/M	45502	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
24	THUKKARAM	29/M	45521	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	8.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
25	PERIYASAMY	27/M	46289	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
26	KUPPAYEE	28/M	45663	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.6	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
27	SUBRAMANI	32/M	44806	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
28	GOVINDARAJ	24/M	43427	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
29	SHANMUGAM	22/M	45927	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	8	MESENTERIC ADENITIS	ACUTE APPENDICITIS	INFLAMMED APPENDIX
30	SOLAYEE	30/F	39385	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
31	VINOTH	33/F	46888	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
32	AROCKIYASAMY	34/M	43529	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
33	RAJU	32/M	46441	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	13.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
34	NAGARAJ	31/M	46279	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
35	PRABU	30/M	45532	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
36	JAYASELVI	29/F	47122	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
37	SARASU	28/F	46201	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
38	PALANI	21/M	44943	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.5	ACUTE APPENDICITIS	NORMAL STUDY	INFLAMMED APPENDIX
39	MOORTHY	26/M	46419	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
40	UMARANI	30/F	46636	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
41	RAHAMATH NISHA	20/F	175049	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
42	VIJAYAN	27/M	45166	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS

43	DASAN	23/M	45327	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	7	MESENTERIC ADENITIS	ACUTE APPENDICITIS	INFLAMMED APPENDIX
44	ANAND	32/M	47688	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
45	MURUGAPILLAI	31/M	44281	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
46	CHARAN	26/M	47639	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	8	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
47	MUTAMILVENDHAN	22/M	47167	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
48	SAKTHIVEL	24/M	45271	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
49	SUBBULAKSHMI	27/F	47196	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
50	GEETHA	21/F	15943	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
51	PONNUSAMY	22/M	15737	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
52	KANI	20/F	48561	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9	MESENTERIC ADENITIS	ACUTE APPENDICITIS	INFLAMMED APPENDIX
53	MUBIN BASHA	25/M	48201	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	8.5	NORMAL STUDY	ACUTE APPENDICITIS	INFLAMMED APPENDIX
54	XAVIER RAFIQ	25/M	48147	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
55	SARAN	29/M	48793	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
56	KALAIARASI	26/F	45492	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
57	MOHAN	30/M	46944	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9	ACUTE APPENDICITIS	NORMAL STUDY	INFLAMMED APPENDIX
58	PALANISAMY	34/M	45199	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
59	PITCHAIPILLAI	22/M	48869	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
60	AROCKIYARAJ	23/M	43767	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	8.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	INFLAMMED APPENDIX
61	SANGAPILLAI	31/M	46187	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
62	KAMALA	20/F	47203	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
63	KUMUTHA	29/F	38536	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS

64	PERUMAL	30/M	40534	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
65	BHARATHI	32/F	49071	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	13	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
66	AMARAVATHI	33/F	45260	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
67	RAMESH	30/F	49395	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
68	VENNILA	32/F	47411	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	NORMAL STUDY	INFLAMMED APPENDIX
69	GANESAN	30/M	47651	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
70	DHANDAYU THAPANI	34/M	46919	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
71	SUBBAIAH	26/M	49622	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
72	KAVYA SHRI	25/F	49617	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.5	MESENTERIC ADENITIS	NORMAL STUDY	NORMAL APPENDIX
73	SIDDHARTH	22/M	48853	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
74	VELLAIYAMMAL	26/F	47918	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
75	SAVITHRI	25/F	49133	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
76	CHELLAPILLAI	22/M	49104	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
77	SANTHA	27/F	49097	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
78	GUNA	30/M	49794	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
79	AGASTHIAR SAMUVEL	31/M	28009	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
80	VENKATAMBAL	35/F	49160	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
81	AJITHKUMAR	30/M	49343	FS III	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
82	FIROJA	27/F	48622	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
83	VASANTHA	22/F	43457	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
84	NATARAJAN	24/M	50330	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
85	JOHN BASHA	26/M	48673	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS

86	KAMALAMBAL	27/M	47876	FSIV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
87	MEENAKSHI SUNDARAM	26/M	49580	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
88	ALAGUDURAI	22/M	52701	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
89	MURUGESAN	30/M	52912	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
90	DEEPA	21/F	45501	FSIV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
91	VALARMATHI	22/F	50870	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
92	MUTHURAMAN	21/M	49082	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	14	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
93	SARUPRABHA	27/F	50268	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
94	VENKATA CHALAM	29/M	48613	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
95	RAMAKRISHNAN	20/M	49404	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
96	EMALDA	21/F	49407	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9	NORMAL STUDY	ACUTE APPENDICITIS	NORMAL APPENDIX
97	SELVAM	24/M	49387	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
98	LAKSHMI KANTHAN	20/F	49878	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
99	KRISHNA MOORTHY	31/M	50886	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.5	NORMAL STUDY	NORMAL STUDY	NORMAL APPENDIX
100	ALAMELU	21/M	50855	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	7	ACUTE APPENDICITIS	NORMAL STUDY	NORMAL APPENDIX
101	PAPPATHI	22/M	48620	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6	ACUTE APPENDICITIS	NORMAL STUDY	NORMAL APPENDIX
102	SELVARAJ	23/M	47745	MSII	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6	NORMAL STUDY	NORMAL STUDY	NORMAL APPENDIX
103	DEVI	30/F	30289	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	5	ACUTE APPENDICITIS	NORMAL STUDY	NORMAL APPENDIX
104	TERESAMMAL	35/F	47658	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	6.5	ACUTE APPENDICITIS	NORMAL STUDY	NORMAL APPENDIX
105	PASUPATHI	32/M	51681	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	7	NORMAL STUDY	NORMAL STUDY	NORMAL APPENDIX
106	THERASA	30/F	50633	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	NORMAL STUDY	NORMAL APPENDIX
107	SANGILI SAMY	36/M	47994	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	NORMAL STUDY	NORMAL STUDY	NORMAL APPENDIX

108	SELVARAJ	20/M	47969	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	8.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	NORMAL APPENDIX
109	CHINNAPONNU	26/F	51256	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
110	DHANALAKSHMI	30/F	50533	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
111	CHANDRA	22/F	51293	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
112	EGAMBARAM	32/M	51808	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
113	ALAMELU	30/F	50855	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
114	LOGAMBAL	35/F	47675	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
115	PASUPATHI	22/M	51681	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
116	THERASA	21/F	50633	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
117	SANGILI SAMY	27/M	47994	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
118	SELVARAJ	26/M	47969	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
119	CHINNAPONNU	30/F	51256	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
120	MANICKAM	29/M	51486	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
121	RAMESH	26/M	46514	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	13	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
122	SUBRAMANI	30/M	51472	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
123	RAJA	22/M	49848	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
124	MUTHULAKSHMI	26/F	49879	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
125	ALAGUMANI	22/F	48581	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
126	SUYAMBU	24/F	52640	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	13.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
127	CHINNASAMY	33/M	18272	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
128	KUMAR	20/M	180271	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
129	SHAJAHAN	28/M	45661	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS

130	GANDHIMATHI	30/F	51302	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
131	AROCKIYASAMY	32/M	51248	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
132	GOPINATH	22/M	52651	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
133	VALLIYAPPAN	35/M	51516	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
134	GOVINDASAMY	27/M	52922	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
135	MADHAVI	29/F	52453	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
136	ALAGURAJ	20/M	53074	MSII	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
137	MURUGAN	22/M	50625	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
138	MADHAVAN	32/M	52630	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
139	ARUMUGAM	30/M	53548	SICU	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
140	KANAGARAJ	21/M	53732	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
141	PRASATH	25/M	52916	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
142	KARIYAN	30/M	4904	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
143	ALAGARSAMY	34/M	53087	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
144	SHEIK MOHAMMED	23/M	51014	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
145	SATHIK BASHA	29/M	54065	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
146	SHYAM SINGH	22/M	53887	MS V	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
147	PONNAMMAL	29/F	51247	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
148	VINOTH	26/M	51258	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
149	VIVEKANANDAN	29/M	52610	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
150	SAMEEMA	22/F	52394	FSIII	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS

151	VIVEK	20/M	52543	FS III	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
152	VELMURUGAN	27/M	52424	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
153	MURUGAN	34/M	52608	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
154	PALANIYANDI	35/M	52606	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
155	VELLAISAMY	31/M	55061	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
156	ABDUL KAREEM	29/M	55073	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
157	VAIRA PERUMAL	24/M	1852816	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
158	MARIKANNU	21/M	52445	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
159	MATHESH	25/M	55641	FS III	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
160	THAILAMMAI	30/F	2022	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
161	PERIYASAMY	22/M	53402	MS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
162	PONNUSAMY	29/M	54190	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
163	KARUPPAN	30/M	54171	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
164	ROSHMANI	29/F	54454	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
165	ARUN PANDIAN	22/M	55364	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
166	KOWSALYA	28/F	53684	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
167	MURUGAN	27/M	55361	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
168	CHITRA	24/F	51495	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	13.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
169	ABI MOHAMMED	29/M	51510	Convict ward	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
170	PATCHAIMUTHU	31/M	56182	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
171	PRADEEP	22/M	56160	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
172	PUSHPAM	21/F	250365	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS

173	SHANTHAM	27/F	53983	FS I	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
174	DINESHKUMAR	20/M	52371	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
175	MUSTAFA	29/M	54604	MS1	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
176	SURESH	22/M	56435	MS1	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
177	CHAKRAVARTHI	27/M	49575	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
178	KULANTHAIRAJ	24/M	56829	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
179	LOGAMMBAL	32/F	57157	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	13	ACUTE APPENDICITIS	ACUTE APPENDICITIS	GANGRENOUS APPENDIX
180	ABDUL MAJID	27/M	57198	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
181	MUTHULAKSHMI	25/F	56174	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	MESENTERIC ADENITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
182	LAKSHMIKANTHAN	27/M	57210	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
183	PONNI	31/F	56886	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
184	SARATHY	27/M	57351	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
185	PONRAMAN	35/F	57176	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
186	DHANAM	22/F	57036	FS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	7	MESENTERIC ADENITIS	NORMAL STUDY	NORMAL APPENDIX
187	RANJITH	20/M	274679	MS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
188	MUTHIAH	24/M	55312	MS VI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	NORMAL STUDY	ACUTE APPENDICITIS	ACUTE APPENDICITIS
189	SAMPOORNAM	29/M	56172	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
190	DHARMARAJ	33/M	57138	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
191	RENGAN	30/M	57196	MS IV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
192	BHUVANESWARI	30/F	55378	FS II	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
193	LOGANAYAKI	32/F	55674	FSII	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
194	PRIYA	22/F	58432	FSIII	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10.5	NORMAL STUDY	ACUTE APPENDICITIS	ACUTE APPENDICITIS

195	MUTHURAMAN	21/M	59876	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
196	PAVITHRA	26/F	52670	FSI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	12	NORMAL STUDY	ACUTE APPENDICITIS	ACUTE APPENDICITIS
197	BHARANI	30/F	57367	FSII	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
198	VASANTHA	33/F	54134	FSII	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	9.5	NORMAL STUDY	ACUTE APPENDICITIS	ACUTE APPENDICITIS
199	RAKESH	23/M	59074	MSVI	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	10	ACUTE APPENDICITIS	ACUTE APPENDICITIS	ACUTE APPENDICITIS
200	PALANISELVAM	26/M	52367	MSV	coolie /900	ACUTE APPENDICITIS	EMERGENCY OPEN APPENDICECTOMY	RA	11.5	NORMAL STUDY	ACUTE APPENDICITIS	ACUTE APPENDICITIS