



## A SHORT REVIEW ON 'HERNIA'

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### Abstract :

In excess of 20 million patients yearly, hernia fix is perhaps the frequently performed careful - techniques around the world. In India the assessed yearly frequency Of Inguinal hernias is 1, 957,850 in momentum circumstance Recent examination by Indian specialists and perceptions from their own training. Implies that Indians are the greatest contender for hernias. Has anybody passed on from a hernia ? It is the central issue before us. Then, at that point result is 35% of patients had inguinal hernia ,22%. femoral hernia, 20% umbilical hernia and 15% incisional hernia. In that Perioperative confusions happened in 13.0 patients and 18 patients passed on and it's death rate is 4.5%. So in this article we Summarize Vorious sorts of hernia like principally inner hernias and outside hernias. Additionally we Study every single hernia Symptoms, determination treatment and furthermore causes . In this review we know recovery of hernia after the surgery and also understand which factor important for the recovery time of hernia surgery Such as patient age, type of hernia which is patient have it means overall of hernia patient. Hernia have Some of Complications and these Complicatio Can often clinical evaluation. Incarcerated obstruction, Strangulation there the main Complications which is we have in hernia. 50 in short We Summarise what really hernia ? which is the types and also what causes and dangerous is ?

### keywords -

Hernia, inguinal, femoral, umbilical, incisional, Strangulation incarcerated.

### Introduction :

A hernia happens when oily tissue or an organ pushes through a weak spot in the including connective tissue or muscle divider. Hernias normally don't improve all alone. They will in general get greater. In uncommon cases, they can prompt perilous complexities. That is the reason specialists frequently suggest a medical procedure. Be that as it may, few out of every odd hernia needs prompt treatment. It relies upon the size and side effects. In the event that it doesn't become suggestive, it may not require treatment by any stretch of the imagination.

A careful hernia fix includes pushing the lump back inside the body part that ought to contain it utilizing cross section, and keeping it there. As Surgeons acquire experience packaging for hernia fix patients procedures proceed to advance and clinical results keep on further developing. A hernia happens when inward organ pushes through a shaky area in your muscle or tissue. There are a few sorts of hernias the like, inguinal hernia, Femoral hernias, umbilical hernias and hiatal hernias. Assuming somebody has hernia, it's critical to treat it rapidly. Hernia can cause difficulties such as reality treating. If you experience side effects like spewing, fever or unexpected torment, then, at that point, it's essential to look for crisis care. All hernias are caused by opening or a shortcoming of muscle and a blend of the pressing factor moves by an organ tissue through the opening/flimsy point. Once in a while the muscle birth shortcoming is available at all the more regularly, it happens further down the road. A hernia happens when an organ/greasy tissue just barely gets through a shaky area in encompassing muscle or connective tissue called sheath. Hernia is a strange protrusion of the entire or part of an organ through an opening in the mass of tissue which it is contained. There are also two types.

1. Internal hernia

2. External hernia.

### **1. Internal hernia:**

Internal hernias (Alternative Plural hernias) are bulges of the viscera through the peritoneum or mesentery yet staying inside the stomach hole. The study of disease transmission - Internal hernias have - generally modest quantity introductions of - 5% a low frequency of <1%. Essential internal hernias are incredibly uncommon in grown-ups. They are a significant reason for little intestinal hindrance and lead to high dreariness mortality whenever left untreated. Internal hernias are rare and involve part of an organ within the abdomen pushing through an opening in the wall of another organ in the abdomen. These include paraduodenal hernias include diaphragmatic hernias

### **2. External hernias:**

At the point when the organ inside the midsection pushes an out an opening or feeble in stomach or pelvic divider is called an outside hernia. External hernias are common, they create a bulge under the skin that can be seen and felt whereas internal hernias do not. Example Umbilical (neval) hernia, Femoral hernias, Inguinal hernias.

### **Types of hernias:**

1.. Hiatal hernia

2. Incisional hernia

3. Epigastric hernia

4. Inguinal hernia

5. Umbilical hernia

6. Femoral hernia

## 1.Hiatal (Hiatus) Hernia....

Condition including a herniation of part of stomach through an opening in the stomach (the level sheet of muscle that isolates the chest from the abdomen).The hazard of hiatal hernia is higher in those individuals who are matured so a long time or over.

### symptoms

- Epigastric pain
- Past -prandial fulness
- Regurgitation digested food.
- Belching
- Dysphagia
- Nausea and vomiting -chronic cough.
- Heartburn.

### Diagnosis.

Hiatal hernia can diagnose by Endoscopy and Manometry. During the system, an endoscope, which is a long, adaptable cylinder with a light and camera toward the end is utilized to see within your upper GI parcel. During the endoscopy, the manometry catheter will be set in the throat down the rear of the throat to the stomach.

### Treatment

- lifestyle modification  
Smaller -sized meals. Avoid lying down after eating.
- Avoid foods and beverages that trigger heartburn Proton pump inhibitors (PPJ)  
Pentoprazole.
- Surgery for severe case and complications.

### Causes

Intense and persistent surrounding muscle, such as while, coughing, vomiting, straining during a bowel movement, excessing or lifting heavy objects.

## 2. Incisional hernia –

It is the kind of interior hernia. An incisional hernia is a bulge of tissue that structures at the site of mending Surgical scar. The kind of hernia represents 15-20% of stomach regions.

### Symptoms

- Lump or prostration abdomen at in the near site of previous insision.
- Nausea
- Vomiting
- Fever

- rapid heart rate
- Pain in abdomen around protrusion

### Diagnosis

Endoscopy.

### Risk factor

- have gained additional weight] become pregnant.
- They are involved strenuous activity

### Treatment

- See Surgery
- Preoperative Preparations required.
- weight reduction by dieting and exercise.
- stop smoking
- treat the respiratory problems

### Causes

- technical of wound closure.
- Selection of suture material for closure of the fascial Layer.
- Placement of drainage tube.

## 3 .Epigastric hernia :

It is called as greasy hernia of linea alba. Tissue distends through the site of scar from a stomach far off stomach or pelvic activity. This hernia generally normal in female. It is deformity in linea alba. It happens in the epigastrium through the lined alba which reaches out between the xiphoid cycle and umbilicus.

### Symptoms.

- (1) Symptomless.- Epigastric hernia is frequently symptomless and might be found by the patient just as an expanding during washing his own body.
- (2) Painful expanding.- Sometimes tolerant with epigastric hernia whines of a restricted aggravation precisely at the site of the hernia. Agony regularly deteriorates on actual effort. Once in a while the greasy substance might be squeezed upon by the tight edges of the hole in the linea alba to deliver fractional strangulation. In these cases the enlarging will be delicate and patients will feel torment on wearing tight clothings.
- (3) Referred dyspepsia.- Patients with epigastric hernia may give indications which imitate peptic ulcer, anyway there is truly no such ulcer. Patient most likely will not have seen the growing even. Peptic ulcer may be accessible in examples of epigastric hernia and such ulcer ought to be banished. Patient may protest of desolation in the wake of eating conceivably in light of epigastric distension. Such dyspepsia may in like manner be a direct result of epigastric hernia.
- (4) swelling in the epigastrium region

- (5) Nausea and vomiting
- (6) High fever
- (7) dull aching pain

#### **Daignosis:**

Epigastric hernia feels firm and doesn't for the most part have a hack drive and can't be decreased. For this, it becomes hard to recognize epigastric hernia from lipoma. Just once in a while at the point when a sac is available, expansile drive and ucibility might be taken note.

#### **Treatment:**

Action.- A Long midline vertical or get over cut is made over the growing. The section point ought to be adequate as the in the linea alba ought to be seen fittingly. The cut is created till the oily distension of hernia ia is distinguished entirety. The projecting extra peritoneal fat is dismantled clear the opening by gauze analization. The pedicle is ligated and the fat distal to the ligation is removed. The opening in the material alba is fixed with non absorbable line. If a little peritoneal sac is accessible. It is opened to check if there is any substance. In case a little section of omentum is the substance, is pulled out and dissected to keep away from partial strangulation. In case deficient strangulation is there the bit of omentum is removed get-togethers. In case the bit of omentum is strong it is pushed again into the peritoneal opening. The sac is ligated and extricated. The opening in the linea alba is fixed with non absorbable fasten. If the opening in the linea alba is gigantic, it should be fixed by covering momentarily (as Mayo's action) or longitudinally.

#### **4.Inguinal hernia :**

An inguinal hernia occur in the mid-region close to the grain region, when greasy or intestinal tissue push through shortcoming in the abdominal divider close to the right inguinal trench enguinal waterway resider at the foundation of the midsection. All kinds of people have inguinal hernia, it brings about a you have distending swell. It is excruciating during movement.

#### **Risk Factor**

- People with ongoing blockage.
- Premature birth and low birth weight
- Pregnancy
- Older grown-ups.
- Smokers, as synthetic substances in tobacco debilitate tissue making a hernia more probable.

#### **Symptoms.**

- Pain when coughing, excisting Or bending over
- Sharp pain
- burning sensation.
- A heavy full sensation in the grain Swelling of scrotum in men

## Diagnosis

Doctors can diagnose inguinal hernia during physical exam. Doctors will ask you to cough while standing & then they can check hernia when it noticeable.

## Treatment

Primary treatment of inguinal hernia is surgery, and its a common operation & highly sucessful procedure done by a well trained surgeon. The doctor will push the bulging tissue back inside and strengthen your abdominal wall with stiches perhaps mesh. They might be able to do this through a small cut in your belly using special tool procedure called leparoscopy.

## 5.Umbilical hernia :

It is a Fatty tissue or some portion of digestive tract pushes through midsection close to the navel I tummy button.Ventral stomach hernia situated at or close to the umbilicus ("paunch button").

- Leads to abdominal contents protruding out through the abdominal wall
- Occurs anywhere from 3cm above to 3cm below the umbilicus
- Majority of cases are acquired (~90%)

### Epidemiology:

- Occurs in 2% of patients
- Second most common type of hernia in adults
- FM 3:1

### Risk factor

- Umbilical hernia are most common in babies with love birth weight and premature babies.
- In adults. the risk factors include-  
being overweight  
being female Having multiple pregnancy.

### Causes:

- Hernia develop at points of weakness in the abdominal wall
  - 1) At site where umbilical vein exited the abdomen
  - 2) Weakened Richet's (umbilical) fascia
- Caused by increased intra-abdominal pressure.

### Symptoms:

- Strangulated Hernia  
Blood supply becomes compromised
- Similar symptoms to incarcerated hernia with the following:  
Unstable condition  
Sudden severe pain  
Fever

Hernia may change color to a red or black  
Bowel obstruction signs and symptoms.

## Diagnosis

- Clinical diagnosis
- Imaging
- Hernias are typically analyzed during an actual assessment by a medical care supplier. The supplier will look and feel for a lump or enlarging in the midsection button region. The enlarging might be more recognizable when a child cries and may move more modest or disappear when a child unwinds or lays on its back.

## Treatment

- Hernia reduction (should only be performed 1-2 times)
- Hernia support belt
- In children, may close spontaneously on its own No treatment in children less than 5 years of age
- Surgery
  - Elective: Placement of a mesh
  - Urgent Symptomatic hernia
  - Emergent: Strangulated hernia.

## 6.Femoral hernia

Our muscles are typically sufficiently able to keep our digestive system and organs in their appropriate spot. Sometimes intra stomach tissue can be pushed through debilitated spot in our muscle when we overstrain. In the event that a bit of tissue pushes through the mass of femoral waterway, its considered femoral hernia A femoral hernia can likewise be known as a femorocele. A Femoral hernia are not normal. Most Femoral hernias don't cause side effects. They can every so often lead to serious issues if the hernia impedes and obstructs blood stream to digestive system This is known as a you strangulated hernia it is health related crisis Surgery and requires immidiate medical procedure. Herniation of intra-stomach substance through the femoral waterway is depicted as femoral hernia (Key Box 34.13). Ladies are all the more frequently included, when contrasted with men with the proportion being 2:1, which is multiplied in parous ladies. Notwithstanding, it ought to be recollected that in ladies, inguinal hernias are the most widely recognized sort of hernia, trailed by incisional hernia. Femoral hernia is the third most normal sort of hernia. Ordinarily the hernia is one-sided, the right side being influenced more frequently than the left side. It is two-sided in around 15-20% of the patients.S

## Causes

1. Pregnancy: As the gravid uterus compresses the external iliac vein, the empty femoral sheath on the medial side allows the femoral vein to expand within femoral sheath. femoral hernias. The maximum incidence is around 30 40 years of age Thus, increased abdominal pressure due to repeated pregnancies is one of the chief factors responsible for Wide femoral canal : This is because of the restricted addition of iljopubic plot into the pectineal line of the pubis and might be liable for a couple of instances of femoral hernia.about 15-20% of the patients.

## Symptoms

- obstructing your interline
- sudden groin pain
- Nausea.
- Vomiting
- Severe stomach pain

## Diagnosis

- Physical examinations.
- Your specialist will play out an actual assessment by delicately touching, or contacting, the region to decide whether you have a femoral hernia. In the event that the hernia is huge, the protruding will undoubtedly be felt. Ultrasound of the stomach and crotch region can affirm the conclusion or build up an analysis if doubt of a femoral hernia is high yet no lump is obvious on actual assessment. Imaging innovation can show the deformity in the muscle divider, just as the jutting tissue.

## treatment.

Femoral hernias are little and asymptomatic may not need explicit treatment. Femoral hernias that are little and asymptomatic may not need explicit treatment. Your PCP may screen your condition to check whether manifestations progress, Moderate to enormous hernias require careful fix, particularly in case they're causing any degree of uneasiness is performed under broad sedation. This implies you will be sleeping for the methodology and incapable to feel torment. Femoral hernia fix should be possible as either an open .

## HISTORY:

A hernia is the protruding of an organ or tissue through a strange opening. Normally a hernia includes Stomach or digestive system. In that hernia infection different researcher found the hernia its manifestations and furthermore also its medical procedure or treatment. Hernia was found by Jean P. Chevrel in 1997. He was advancing clinical studies. Then Second researcher was Henry Ingersoll Bowditch investigated the ahead of schedule of hiatal hernias portrayed posthumous in 1846. At First activity done by cloudius Amy and which is for the most part significant for two reasons. Initially depiction of hernia which is containing a Vermiform reference section and presently today we additionally called as Amyand's hernia. Then, at that point Second principle reason is recorded appendectomy throughout the entire existence of medical procedure. Aside from this researcher Hebay o the Marcy he was one American general Surgeon from Boston: performed high ligation of the hernia sac and He additionally interior ring which is conclusion and to fix backhanded. hernias. Presently this strategy used to mainty particularly in pediatric patients. Hernia have different sorts, most normal kinds of hernia are incisional femoral umbilical, inguinal and hiatal hernia. In that inguinal means internal crotch, it is first effective inguinal hernia fix was depicted by the Edoardo Bassini. in 1880 Bassini said that Conjoint ligament it implies framed. Versus abdominis the finishes of the trans. what's more, inside slanted muscles and which is around to the inguinal tendons and its shut. At the point when careful portrayal and furthermore treatment of hernias found by the traces all the way back to the antiquated Egypt. which is National Institute. of wellbeing (NIH).s



## Pathophysiology of hernia :

It happens because of the profound inguinal ring neglecting to close during embryogenesis after a gonad has traveled through it. When inside or other stomach tissue moves into and expands the vacant space, a noticeable lump structures and the hernia turns out to be clinically clear. Hiatal hernia isn't totally perceived in people or creatures. It has a complex multifactorial etiology and pathophysiology. An essential unsettling influence of the lower oesophageal sphincter has not been displayed in people or creatures. Information on pathophysiology is important to organize fitting treatment. Clinical or potentially careful treatment isn't shown in asymptomatic cases. Clinical treatment ought to be utilized for as long as multi month in stable instances of sliding hiatal hernia. Paraoesophageal hiatal hernias and any huge sliding hiatal hernia ought to be considered for brief careful treatment. Careful procedures utilized rely upon the sort of hiatal hernia present.

## COMPLICATIONS :

Hernia is the protrusion of an organ, tissue or the part of an organ through the wall of the cavity normally contains it. Hernia occurs when our body post pushes through opening in muscle or tissue which is holds it in place .In that mostly hernias mainly occur in the stomach which is between Chest and hips. In abdomen most common complications of abdominal wall. These Complications are strangulation, obstruction,dysfunction, incarcerated. These complications can often at clinical evaluation.

1. Incarcerated  
In that hernia Contents are freeducible but which is not obstructed or strangulated.
2. Strangulation In that blood supply is compromise it may causes Venous Congestion ischemia & later necrosi's and -gangrene may occur In short we called when blood supply to the Contents is jeopardized an irreducible hernia.
3. Obstruction Suppose our body part when bowel herniates, bowel longer the Contents can no longer pass the obstruction.

### Some other complications –

- Irreducibility
  1. Narrow neck
  2. Ordema
  3. adnesion
  4. impacted farces
- Rupture of sac –  
In that pressure necrosis of overlying skin trauma.
- Fistula formation - It is occur at Richter's hernia So, all these complications is that occur in various types like, bladder injury, wound seromo, or we also Called hematoma, urinary retention, surgical site infections or other Conditions.

## RECOVERY OF HERNIA :

### After Surgery –

In that patient have surgery then fastest way to recover hernia surgery is gentle exercise like as walking which is helpful for faster healing. Then Small things such as to avoid lifting, any thing heavy activities for at least four weeks. After Surgery recovery time is about 3 weeks. After hernio Surgery patient have mild to moderate. pain, but most of patients. feel better within a few days. and much better within a week of surgery.

- Recovery time of factors such heria after hemia Surgery
  - 1) Type of hernia patient have
  - 2) Type of Surgery patient have
  - 3) Overall patient health Patient age

After hernia network a medical procedure, most patients can return home that very day. Full recuperation might take four to about a month and a half. Just get-togethers, patients ought to perform just vital day by day works yet can get back to light action following half a month. Substantial movement can continue following a month and a half. In instances of inguinal hernia, a circle of the digestive system distends through an opening in the stomach divider into the inguinal channel, which contains the spermatic line. While a male embryo is in the belly, the testicles are framed in the midsection and before birth, they drop into the scrotum by means of the inguinal waterway. An umbilical hernia forms when part of the intestine or fatty tissue protrudes through an opening in the abdominal muscles near to the navel, causing the belly button to swell. This type of hernia may develop in babies if the opening that the umbilical cord passes through does not close properly after birth.

**CONCLUSION :** Treatment dependent on normalized conventions for preoperative evaluation and postoperative follow-up is needed to explain the current contentions. The total information in regards to biologic lattice use in VHRs under polluted conditions doesn't uphold the case that it is superior to engineered network utilized under similar conditions. The profoundly advanced and modestly used act of putting biologic lattice in defilement is being done outside of the first planned use, and a re-assessment of or conceivable ban on biologic cross section use in hernia medical procedure is genuinely justified. On the other hand, an industry-supported public vault of patients in whom ventral hernia fixes included biologic cross section would considerably add to our arrangement with respect to how these fascinating biomaterials are being utilized and their by and large clinical viability. Patients had worries about network and knew about network related inconveniences. Patients playing out their own exploration, just as females and intermittent hernia patients, had more awful view of lattice. Intermittent and incisional hernia patients had more prominent worries about complexities, repeat, and recuperation. Preoperative schooling concerning cross section a lot decision for every activity facilitated patient tension

## RESULT :

Randomized controlled preliminaries contrasting laparoscopic and open strategies couldn't be distinguished. Nineteen of the distributions depicted the consequences of review series. Along these lines, a large portion of the examinations recovered were low in chain of command of proof (level II-c or lower). The general middle

clinic time as distributed was 3 days for patients worked laparoscopically and 10 days in the customary gathering. Postoperative inconveniences, like pneumonia, apoplexy, discharge, and urinary and wound lot diseases, had all the earmarks of being more continuous get-togethers medical procedure. Follow-up was longer for regular medical procedure (middle 45 months versus 17.5 months after the laparoscopic strategy). Repeat rates detailed were higher in patients worked expectedly (middle 9.1% versus 7.0% for patients worked laparoscopically). Repeats after PHH fix might diminish with utilization of lattice in the break, albeit uniform models for this strategy are inadequate. No ends could be drawn in regards to the need for an extra antireflux technique. Besides, uniform explicit signs for the need of an esophageal extending technique or preoperative appraisal strategies for abbreviated throat couldn't be distinguished.

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