10% of men in Uganda have hernia scars with current rate of surgery @ 16/100000/year

Lowest need is about 200/100000/year

15% present with strangulated hernia

Significant difference between west and east
- Lifetime risk 27% for men & 3% for women
- Diagnosis of Hernia
  - Egyptians [1500 BC]
  - Phoenicians [900 BC]
  - Greeks [400 BC]
- Pharaohs Merneptah (1215 BC) & Ramses V (1157 BC) had hernia
- E Bassini (1844-1924) was the father of hernia surgery & his repair remained Gold standard for a long time. He did 274 hernia repair with 4% recurrence & 5% SSI

- Halsted, Marci and Shouldice described the modifications to the techniques to reduce recurrence
The Shouldice technique reduced the recurrence to 1%.

The Lichtenstein repair further reduced recurrence to 0.7%.

In the sixties Dr. Richard Newman popularized the use of Prolene mesh for repair.
GILLS: HERNIOPLASTY

- Shouldice repair
- McVay repair
Three Landmarks of Hernia repair

- Tissue repair by Bassini
- On-lay mesh by Lichenstein
- Laparoscopic hernia repair
Pre – peritoneal repair
- Suggested by Bates in 1743
- Popularized by Stoppa
- Laparoscopic repair follows the principle
- TAPP
- TEP
GILLS: HERNIOPLASTY

Market Penetration

- 93% in 3 years for Laparoscopic Cholecystectomies
- For Hernia it is 15% in 16 years
- Recommended for bilateral hernia

The US was the major contributor in this region both in terms of revenue and volume.

In APAC, the Hernia Repair Device market will grow at a CAGR of 8.20%.

The market in EMEA is expected to reach 1720.9 million tons by 2021.

Developing countries such as China and India will witness the highest growth rate during the forecast period.
The position is steep head down position
- Important to strap the patient well with shoulder braces and sheets to prevent slipping
- Prophylactic antibiotics are important
- Steep Trendelenburg position
- Drape both perineum & abdomen
Once the patient is cleaned and draped the Lift apparatus is placed in the correct position.

It is about 6 inches above the Umbilicus and 2 inches towards the foot below the Umbilicus.

The lower edges are held up with towel clips and No. 15 blade is used to cut from the middle of the Umbilicus.
“S” shaped retractors are used to expose and cut the rectus transversely.

Artery Clamp is used to check if peritoneum is entered.

Finger is used to sweep around to make sure that there are no adhesions.
Holding in the position shown the ring is passed
The finger checks again to see that there are no omentum or intestines between the ring and the abdominal wall
The Lift is then fixed
GILLS: HERNIOPLASTY

Peritoneal incision 4 to 5 cm above the hernia orifice
Important to get into the correct plane of dissection
Plane is anterior to transversalis fascia
Combination of blunt and sharp dissection
is used for creating avascular plane
The plane of dissection is anterior to the Fascia Transversalis. Important to have Inferior epigastric vessel anterior.
The first structure to identify is the pubic bone.

The lateral dissection then exposes the transversalis fascia which is dissected to expose the Cooper's ligament.
The lateral dissection exposes the psoas muscle and extends up to the ASIS.

The lateral cutaneous muscle could be seen.
**Identify the sac**

**Circumferential dissection around the sac especially dissecting the vas away from the sac**
Identify the sac

Circumferential dissection around the sac especially dissecting the vas away from the sac
The limit of dissection is till the place where the cord turns medially.

It is near the obliterated umbilical artery where it turns medially.
With the complete dissection of the sac the testis could be seen in the scrotum through the hernial orifice.

The cremastic fibers are dissected.
The triangle of doom is formed by the vas, testicular vessels and the peritoneal fold. Contains the iliac vessels

The triangle of pain is formed by the ilio–pubic tract, testicular vessels and peritoneal fold and contains the nerves. No need to look for Obturator nerve
The Mesh could be fixed with 2 o’ Prolene sutures
One near the Cooper’s ligament and the other superolaterally & superomedially if necessary
The peritoneum is then closed over the mesh
The conventional Lap. Hernia surgery is difficult and advanced & hence open was preferred

We restarted with GILLS as open techniques could be used

Some centers do TEP too