

# HISTORICAL FACTS OF GROIN HERNIAS

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- Earliest record of Inguinal Hernia dates back to 1500 BC.
- Literal Meaning of Hernia in Greek is offshoot, a budding or a bulge. The Latin meaning is rupture or a tear.
- During first century, operating of Hernia comprised of cutting neck of Scrotum there by cutting Hernial sac, cord and testes.
- Paul of Aegina in 700AD described the mass ligation of sac and cord at the external ring .
- Guy de chauliac in 1363 differentiated between Inguinal and Femoral Hernia.
- Franco in 1556 described the use of grooved dissector to cut strangulating neck.
- Casper Stomayer in 1559 published the first text book on Hernia.
- Lister in 1865 introduced method of antiseptics contributing a great deal in hernia surgery.
- Koch Developed method of asepsis.
- Marcy, used antiseptic techniques in repair of Hernia.
- Lucas Championniere in 1881 first splitted the external oblique aponeurosis to reveal the inguinal canal.
- The greatest contribution in Hernia Surgery is by Edoardo Bassini, the Italian Surgeon. He laid the Inguinal canal wide open and then repaired the fascia transversalis from pubic tubercle to beyond the internal ring. He realised the importance of repairing the transversalis fascia and reinforcing the posterior wall of the canal. He performed the first operation in 1884 and published his work of 206 operations in 1887, 1888, 1890 and 1894. He is called the father of modern Herniorrhaphy.
- Shouldice in 1953 described multi layered repair. He repaired by double breasting the fascia transversalis, the inguinal ligament and external oblique aponeurosis. He used fine wires for suture.
- Shouldice Hospital in Toronto, Canada is the world authority in Hernia surgery with record of recurrence rate of less than one percent.
- Modern pioneers in the fields of tissue repair of Hernia are Berliner (1984), Liechtenstein (1986) and Wilkinson (1988).
- Earliest darn repair was done by MC Arther in 1901 followed by Kirschner in 1910 and Handly in 1918.
- Gallie and Le Mesurier in 1921 used fascia lata for repair.
- Mair in 1945 used strips of skin denuded of dermis from incision margins for repair.
- Ogilvie in 1937 introduced silk lattice repair.
- Maingot in 1940, 1941 and 1970 advocated Floss silk for his darn.
- MC Leod in 1955 used silk for posterior lattice repair.
- Nichols and Diacs in 1940 and Aries in 1941 explored the use of nylon in Hernia Surgery in the experimental animals.
- Melick in 1942 first reported the use of braided multifilament nylon for use in inguinal Hernia.

- Moloney in 1948 advocated the Bassini type suture of continuous monofilament nylon. This was further supported by the works of Shuttleworth and Davies in 1960, Leacock and Rowe in 1962, Ellis in 1970, Calluni Doig and Kinmonth in 1974, and Abrahamson in 1987 and 1988.
- Earliest synthetic sheet or weaves or patches to fill the gap in the weakened posterior wall were advocated by Witzel and Geopel in 1900 in Germany.
- Tantalum metal sheets were introduced by Burke in 1940.
- PTFE (Poly Tetra Fluoro Ethylene), a synthetic material was introduced in 1957 by Harrison.
- In recent years, woven monofilament Polyamide or Knitted monofilament polypropylene have been used by Rives in 1967, Stoppa in 1984, Lichtenstein in 1986, Gilbert in 1987 and others.
- The modern era of transabdominal but extra peritoneal repair of Hernia was introduced by Cheatle in 1920 with various modifications by Henry in 1936, Musgrove in 1949, MC Ewen in 1950, Mikkelsen in 1954, Nyhus in 1960 & Readin 1968 & 1979.

## HISTORY OF EXTERNAL MESH AND HERNIA REPAIR

1958 - Usher:	Mesh prosthesis to buttress and reinforce a previously sutured repair.
1974- Lichtenstein:	Plug repair for femoral and recurrent inguinal Hernia.
1984- Martin and Max:	Reinforcement of repair with a mesh.
1984- Stoppa:	Dacron mesh placed in the pre-peritoneal space over a large area.
1986- Lichtenstein:	Only mesh patch as a primary Hernia repair.
1991- Gilbert:	Sutureless repair of small to moderate sized by inguinal Hernia cones & Swatches.
1992- Bellis:	Mesh and rectus abdominis tendon transfer.
1993- Robbin and Rutkow:	Mesh plug herniorrhaphy for all inguinal and femoral Hernia.
1993- Horton and Flovence:	Preperitoneal patch through anterior route.
1993- Wexner:	Laparoscopic Hernia mesh repair.

## Histroy of Classification of groin Hernia

- Castein in 1967 published a 3 staged classification of Inguinal and Femoral Hernia.
- Halversion in 1970 Described four groups of groin Harnia.
- Nyhus in 1960 Described four types of Hernia.
- Gilbert in 1987 and 1988 discussed his simple classification of five types.

### Present day classification:

#### A. Gilbert's classification:

1. **INDIRECT:**
  - Type I: Snug internal ring, intact canal floor.
  - Type II: One finger breadth internal ring, defective canal floor (scrotal and sliding)
2. **DIRECT:**
  - Type IV: Entire canal floor defective no peritoneal sac anterior to canal floor, intact internal ring.
  - Type V: Diverticular defect admitting no more than one Finger, internal ring intact.

## NYHUS CLASSIFICATION:

- Type I: Indirect inguinal Hernia: Internal Inguinal ring normal (Child's Hernia)  
Type II: Indirect inguinal Hernia: Internal ring dilated but posterior inguinal wall intact. Inferior deep epigastric vessels not displaced.  
Type III: Posterior wall defect.  
A. Direct Inguinal Hernia.  
B. Indirect Inguinal Hernia. Internal ring dilated medially encroaching or destroying the transversalis fascia of the Hesselbach triangle (eg. Massive scrotal, sliding or pantaloon Hernia)  
Type IV: Recurrent Hernia

## References:

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2. Taylor I, gonson CD, Recent advances in surgery, No. 18, Charchill Livingstone 159-177.
3. Raymond C. Read, the development of Inguinal Herniorrhaphy. The surgical clinics of North America APR 1984, p 185.