

**A COMPARATIVE STUDY OF USE OF EXTERNAL  
OBLIQUE APONEUROSIS FOR STRENGTHENING OF  
POSTERIOR WALL OF INGUINAL CANAL(NO MESH  
DESARDA'S TECHNIQUE) VS CONVENTIONAL  
HERNIA REPAIR WITH MESH (LICHENSTEINS  
REPAIR)**

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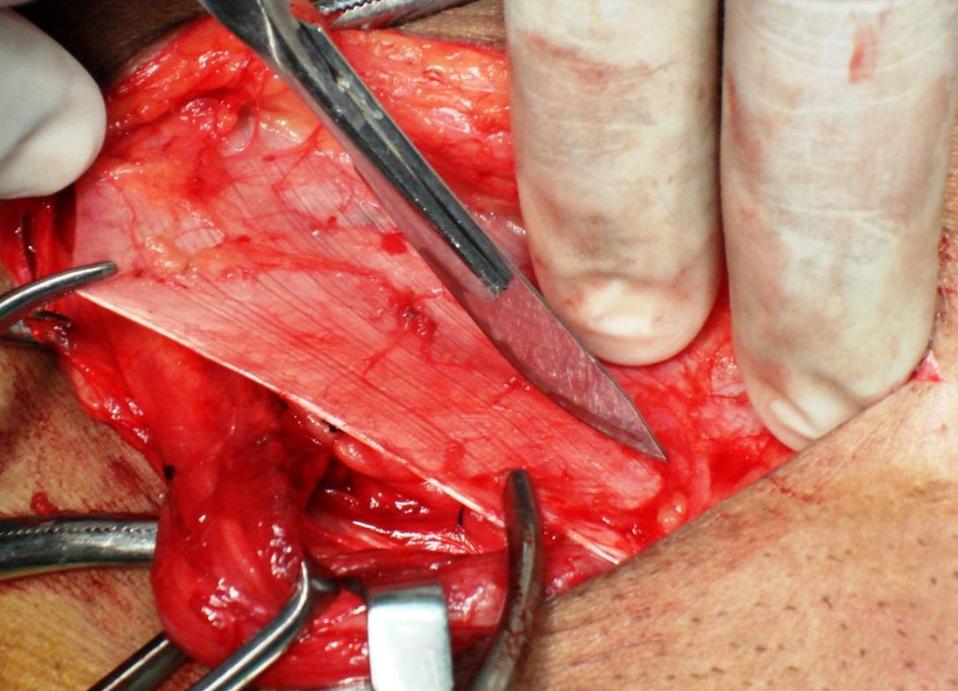
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# INTRODUCTION

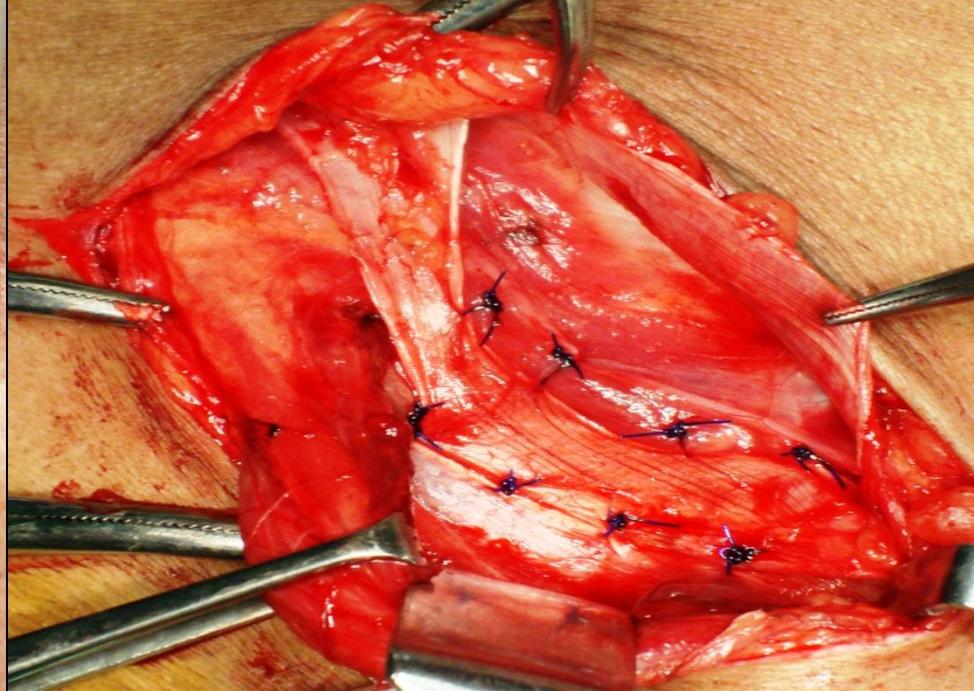
- Desardas Technique is a relatively new technique in inguinal hernia repair.
- It uses a strip of external oblique muscle to strengthen the posterior wall of inguinal canal.
- This is a complete tissue repair and does not use prosthetic mesh.
- This new procedure has not been reported to cause chronic pain ,decreased testicular blood flow or infertility and mesh related complications. Moreover it can be used in such situations where mesh cannot be used.
- The aim of the study was to compare Desardas No Mesh Inguinal Hernia repair technique to conventional Lichtenstein's Mesh Repair Technique in terms of Operating time, Post-operative pain, post-operative complications, hospital stay, time to ambulate, financial expenditure, chronic pain and recurrence.

# MATERIALS AND METHODS

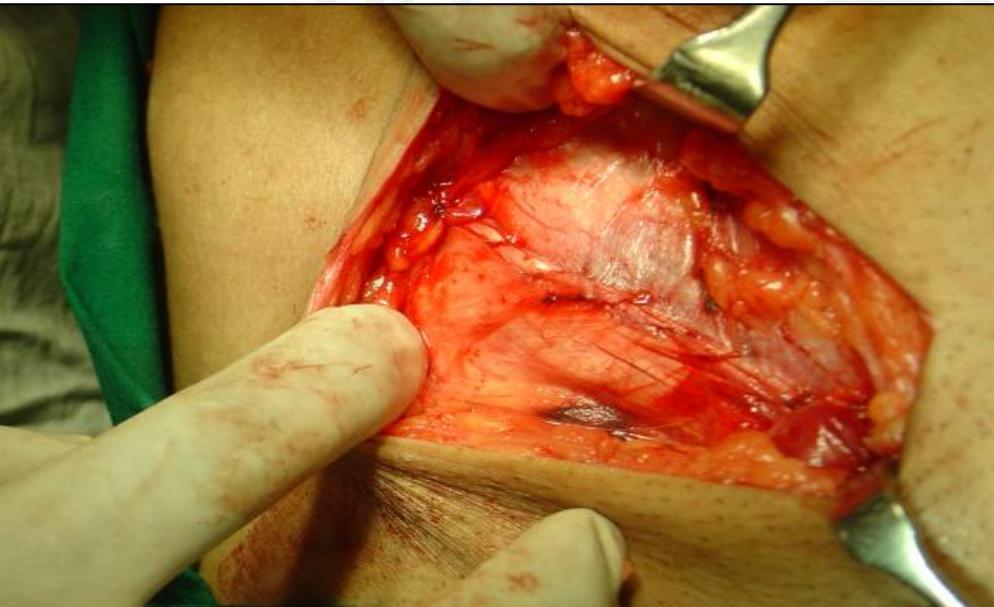
- The study was done over a period of one year from July 2013 to June 2014 with follow up period of one year.
- The study population consisted of 60 male patients with either direct or indirect inguinal hernias.
- Patients underwent either DESARDA procedure or LICTENSTEINS procedure after randomisation and double blinding.
- DESARDA procedure involves use of a strip of external oblique(EO) derived from the superior flap of EO which is formed after opening the inguinal canal. The blood supply and nerve supply are maintained intact as the lateral continuity of the muscle strip is maintained.
- The various outcomes and complications are compared. VAS score is used for pain measurement post operatively.
- A follow up examination was planned for one year to look for chronic pain and recurrence.



**Incision of upper leaf of external oblique**



**Upper leaf of external oblique sutured to conjoint tendon**



**Closure of external oblique aponeurosis**

# DISCUSSION

- The mean duration of surgery **45.50 min(D) vs 56.37 mins (L)**. Significantly lower with DESARDA
- Mean Post-operative Pain was (VAS SCORE) **4.77(D) vs 5.8(L)**, nearly equal with no statistically significant difference
- Duration of stay in hospital **6.1(D)vs7.1(L)** days. No significant difference.
- The mean duration of return to normal gait **4 days (D) vs 5.72 days (L)** . No significant difference.
- The mean duration of return to regular work was 9.6 days (D) vs 11.8 Days (L) No Significant difference.
- Mean cost of the procedure is significantly less with Desarda procedure.

# COMPLICATIONS

- Post-operative seroma was more common in Desarda's procedure (24% vs 13%). This was significantly higher.
- There were 6% patients complaining of chronic pain in Lichtenstein's while no patient had this complaint in Desarda's group.
- One patient in Lichtenstein's group had recurrence while Desarda's group did not have any patients with these complaints.



# CONCLUSION

The current study found the following advantages with Desarda over Lichtensteins:

- This is a **physiological repair, dynamic and tension free**
- Recurrence and complication rates equal to or better than Lichtensteins repair. However seroma rates are more with Desardas.
- Pain, ambulation time and time of hospital stay are similar to Lichtensteins. However chronic pain(>3 Months) is less.
- Low cost for the patient as mesh is not used and can be used in situations where mesh cannot ne used
- Simple procedure with less operating time than Lichtensteins repair.
- No risk of complications in future like decreased testicular blood flow, infertility and testicular atrophy etc as there is no mesh placed

# REFERENCES

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