



COMPARATIVE STUDY OF PRESERVATION VERSUS ELECTIVE DIVISION OF ILIOINGUINAL NERVE IN OPEN MESH REPAIR OF INGUINAL HERNIA

Surgery

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ABSTRACT

Background: Post-hernioplasty chronic groin pain is one of the most important complications encountered after inguinal hernia repair. Routine ilioinguinal nerve excision has been proposed to avoid chronic post-hernioplasty neuralgia. The study aimed to evaluate the effect of routine ilioinguinal nerve excision compared to nerve preservation on chronic groin pain and other sensory symptoms in lichtenstein inguinal hernia repair. **Methods:** The study was conducted in the department of general surgery, at saraswati institute of medical sciences Hapur for duration of 12 months from July 2022 to July 2023. A total of 60 patients of uncomplicated inguinal hernia, who met the inclusion criteria, planned for lichtenstein hernioplasty were randomly divided into 2 groups with 30 cases with ilioinguinal nerve preservation (group A) and 30 cases with elective division of the nerve (group B). Follow up was done upto 1 year and patients were inquired regarding pain, hypoesthesia and numbness and data was compared and analysed. **Results:** The incidence of post-operative neuralgia was 23.33% vs 6.67% ($p=0.05$) at 1 year in group A and group B respectively. The difference in pain was significant in both groups. The incidence of post-operative hypoesthesia was 10% vs 16.67% ($p>0.05$) at 1 year follow up in group A and group B respectively. The incidence of numbness was 11.11% vs 16.67% ($p>0.05$) at 1 year in group A and group B respectively. No statistically significant difference was found in both groups. **Conclusions:** The prophylactic excision of ilioinguinal nerve during lichtenstein mesh repair decreases the incidence of chronic groin pain after surgery.

KEYWORDS

Chronic groin pain, Inguinal hernia, Ilioinguinal nerve, Lichtenstein repair

INTRODUCTION

A hernia is a protrusion of a viscus or part of a viscus through an abnormal opening in the walls of its containing cavity.¹ Although a hernia can occur at various site of body, these defects most commonly involve the abdominal wall, particularly the inguinal region. 75% of all abdominal hernias are found in the groin; of all groin hernias, 95% are inguinal hernias and 5% are femoral hernia.² Inguinal hernias are 9 times more common in men than in women.²

Inguinal hernia is a common surgical condition requiring operative repair.³ Various techniques have been used for repairing inguinal hernias such as the Lotherissen, Cooper ligament repair or McVay repair, Bassini repair and Shouldice Repair but Lichtenstein tension free mesh repair is the gold standard.⁴ In the lichtenstein repair, a sheet of polypropylene mesh is applied to the inguinal canal. Its most presenting complication, and a major cause of immobility and departure from work, is post-operative chronic groin pain.⁵ Chronic post-hernioplasty groin pain is defined as pain lasting for more than 3 months after surgery. It occurs as a result of entrapment or nerve injury. Most commonly ilioinguinal nerve is involved.⁶ Pain may also be dependent on the method of fixation of mesh.⁷ Invalidating pain in hernioplasties can be caused by strangulation of muscle fibres or by the compression of the regional nerves, despite their tension-free nature, raising the concept of division of ilioinguinal nerve in elective procedure, leading to decreased postoperative pain.⁸ However, elective division of all these sensory nerves may reasonably lead to considerable sensory loss in the inguinal region.

Much controversy exists regarding the best management for the ilioinguinal nerve during hernia repair. Traditional surgical techniques dictate that the ilioinguinal nerve should be preserved at all times during repair because of the morbidity associated with cutaneous sensory loss and chronic groin pain following nerve injury. Elective division of the ilioinguinal nerve to reduce development of chronic post-hernioplasty pain has been recommended by some workers.⁹

Initially, it was recommended that nerve preservation helps in minimizing the postoperative pain after inguinal hernioplasty, while division of ilioinguinal nerve during this procedure, was found to be a factor for altered pain sensation.¹⁰

Aims and Objective

To evaluate the effect of preservation versus elective division of the

ilioinguinal nerve on chronic groin pain and hypoesthesia after Lichtenstein tension free inguinal hernia repair using Polypropylene mesh.

Methodology Source Of Data

This is a prospective study comprising 60 patients of inguinal hernia over a period of 12 months from July 2022 to July 2023 with 6 months follow-up. In this present study, the clinical material consists of patients admitted with uncomplicated inguinal hernia (both males and females) in the Department of General Surgery, at Saraswati institute of medical sciences, Hapur.

Method Of Collection Of Data

Sample Size: The size of the sample works to 60 cases. 30 cases with ilioinguinal nerve preservation (group A) 30 cases with elective division of the nerve (group B).

Inclusion Criteria

Patients admitted with uncomplicated inguinal hernia (Direct& Indirect).

Exclusion Criteria

Patients below 18 and above 70 years. Patients with diabetes mellitus. Patients with complicated inguinal hernias and recurrent hernias. Previous surgery in the inguinal region. Mesh allergy and Subsequent hernia repair in the observation period. Previous history of trauma and pain at the inguinal region. The data will be collected in prescribed Proforma where in it contains, particulars of the patient, Clinical history, clinical examination and diagnosis, Relevant investigations, and details of surgery.

Follow-Up Period of follow up being 6 months from the day of surgery. Parameters used for comparison Pain (using visual analogue pain scale). Hypoesthesia. Numbness. Ethical clearance has been obtained from ethical committee of Saraswati institute of medical sciences, Hapur, prior to conducting the study.

Statistical Analysis

In this study the results of the two groups were compared and analyzed by using SPSS software version 22.

RESULTS AND OBSERVATIONS

In this "Comparative study of preservation versus elective division of ilioinguinal nerve on post operative groin pain, in open mesh repair of inguinal hernia" Conducted in department of Surgery at Saraswati institute of medical sciences, Hapur. From July 2022 to July 2023. A Total of 60 Patients of uncomplicated inguinal hernia who underwent

Lichtenstein mesh Hernioplasty included for this Prospective comparative study, 4 of 30 patients in Nerve preservation and 6 of 30 patients in nerve excision group were lost to follow –up, leaving 50 patients who completed the study protocol fully. So 26 patients with Nerve preservation (group A) and 24 patients with nerve excision (group B) were considered for the study.

Patients Demography

Table-1 Age At Presentation

Age group (in years)	No of Patients	Percentage (%)	Group A n=29 (%)	Group B n=24 (%)
<20	3	5.20	1 (3.4)	2 (7.1)
21-30	5	8.77	2 (6.90)	3 (10.7)
31-40	8	14.03	4 (13.8)	4 (14.3)
41-50	12	21	5 (17.2)	7(25)
51-60	17	29.8	12 (41.4)	5(17.9)
61-70	12	21.2	5(17.3)	7(25)

In this study the age of the patients ranged between 18 years to 70 years . The youngest patient included in this study series was 18 years, and eldest was 70 years old . Almost 72% of the patients were in 41 – 70 age group. This includes 38.6% in group A and 33.4% in group B.

Sex Distribution

Table-2 Sex Distribution

Sex	No of patients	Percentage
Male	53	93
Female	04	07

In this study only 7% of the patients were female, as compared to males who made 93% of the total cases.

Table-3 Mode Of Presentation

MOP	No of patients	Percentage
Swelling only	39	68.4
Swelling with pain	18	31.6

Without exception all the patients presented with swelling , Of these 68.4 % of patients presented with swelling only , while 31.6 % patients presented with both swelling and pain.

Table-4 Duration Of Illness

Duration	No of patients	Percentage
< 6 Months	13	22.8
6– 12 Months	24	42
>1 year	20	35.2

Majority of the patients in this study ie, 64.8 % of patients presented and were operated with in 1 year of the onset of hernia, and 35.2 % presented later than a year for operation.

Table-5 Relation With Occupation

Occupation	No of patients	Percentage
Heavy work	38	66.7
Moderate work	14	24.6
Light work	5	8.7

The present study shows that 66.7 % patients were involved in heavy and strenuous work like Agricultural labour, Manual labour, and Coolie. 24.6 % of patients were involved with moderate work like Clerks, Teachers and Drivers. And 8.7% of patients involved with light work.

Table- 6 Predisposing Factors

Factors	No of patients	Percentage
Bladder outlet obstruction	12	21
Constipation	9	15.8
Chronic cough	6	10.5
Smoking	13	22.8
No obvious factors	20	35

In this study 14% of the patients showed the features of bladder outlet obstruction, 24% had constipation, 6% had chronic cough, 24% of patients work was lifting heavy weight eg, farmers, and 28% were smokers.

Table- 7. Location Of Hernia

Side	No of patients	Percentage
Right	31	54.4

Left	25	43.9
Bilateral	1	1.7

The Present study showed that hernia was more common on right side ie, 54.4% . Left side hernia comprised about 43.9 % , where as 1.7% was bilateral.

Table-8 Type Of Hernia

Type	No of patients	Percentage
Direct	13	22.8
Indirect	44	77.2

In this present study 44 cases were belonging to indirect hernia which contributed 77.2%. And 13 cases belongs to direct hernia which contributed 22.8% of the total.

Table-9 Comparision Of Study Groups

	Comparison of	Nerve preservation Group A (n=29) (%)	Nerve division Group B (n=28) (%)
1.	Demography		
	Male	27 (93)	26 (92.9)
	Female	2 (7)	2 (7.1)
	Mean age	50 ± 13	48 ± 15
2.	Mode of presentation		
	Swelling only	20 (68.97)	19 (67.86)
	Swelling with pain	9 (31.03)	9 (32.14)
3.	Strain factors		
	BOO	6 (20.7)	6 (21.43)
	constipation	4 (13.8)	5 (17.86)
	Chronic cough	4 (13.8)	2 (7.1)
	Smoking	6 (20.7)	7 (25)
4.	Location		
	Right	12 (41.4)	19 (68)
	Left	16 (55.2)	9 (32)
	Bilateral	1 (3.4)	0(0)
5.	Type		
	Direct	7 (24.1)	6 (21)
	Indirect	22 (75.9)	22 (79)

In the present study Preservation of ilioinguinal nerve during Lichtenstein Inguinal hernia repair was performed in 29 patients mean age of 49.59 ± 13.94 years including 27 (93%) men and 2 (7%) women. Of the 29 patients, 20 (68.97%) presented with swelling in the groin only, whereas 9 (31.03%) presented with swelling associated with pain.

Of the 27 male patients, 7 (24.14%) showed features of bladder outlet obstruction, 5 (17.24%) had constipation, 4 (13.8%) had chronic cough and 6 (20.7%) were regular smokers.. And 2 women had no obvious predisposing factors.

Regarding side, 12 (41.4%) patients had right sided inguinal hernia, 16 (55.2%) had left side inguinal hernia and 1 (3.4%) had bilateral presentation. Of the 29 patients , 22 (75.9%) cases were indirect inguinal hernia, and 7 (24.1%) cases were direct hernia.

Routine excision of ilioinguinal nerve during Lichtenstein hernia repair was performed in 28 patients , 28 were male patients and 2 were females with mean age of 48 ± 15 years.

Of the 28 patients, 19 (67.86%) patients presented with swelling in the groin only, where as 9 (32.14%) presented with swelling associated with pain.

6 (21.43%) patients showed features of bladder outlet obstruction, 5 (17.86%) had constipation, 2 (7.1%) had chronic cough and 7 (25%) were regular smokers..

Of the 28 patients, 19 (68%) had right sided inguinal hernia , 9 (32%) had left sided inguinal hernia .

22 (79%) patients had indirect inguinal hernia, and 6 (21%) were direct hernia. 83 In the present study Preservation of ilioinguinal nerve during Lichtenstein Inguinal hernia repair was performed in 29 patients mean age of 49.59 ± 13.94 years including 27 (93%) men and 2 (7%) women.

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only, whereas 9 (31.03%) presented with swelling associated with pain. Of the 27 male patients, 7 (24.14%) showed features of bladder outlet obstruction, 5 (17.24%) had constipation, 4 (13.8%) had chronic cough and 6 (20.7%) were regular smokers. And 2 women had no obvious predisposing factors. Regarding side, 12 (41.4%) patients had right sided inguinal hernia, 16 (55.2%) had left side inguinal hernia and 1 (3.4%) had bilateral presentation. Of the 29 patients, 22 (75.9%) cases were indirect inguinal hernia, and 7 (24.1%) cases were direct hernia.

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Of the 28 patients, 19 (68%) had right sided inguinal hernia, 9 (32%) had left sided inguinal hernia. 22 (79%) patients had indirect inguinal hernia, and 6 (21%) were direct hernia.

Follow-up

Post operative Chronic groin pain, Hypoesthesia, and Numbness has been analysed in two groups (A & B), At POD -1, At 1 Month, At 3 Months and results are compared with p value.

Table-10 Incidence Of Post Operative Neuralgia

Follow-up at	Nerve Preservation n=29 (%)	Nerve Preservation (%)	Nerve excision N=28 (%)	Nerve excision (%)	P value
POD-1	18	(62)	14	(50)	0.36
1 Month	16	(55.2)	10	(35.7)	0.14
3 Months	15	(51.7)	6	(21.4)	0.02

In the present study the incidence of post operative neuralgia in group A (ilioinguinal nerve preservation) was compared with group B (ilioinguinal nerve excised) during Lichenstein hernioplasty.

The results of follow up visits are 62% vs 50% ($p > 0.05$) at POD-1 ; 55.2 % vs 35.7% ($p > 0.05$) at 1 month and 51.7 % vs 21.4% ($p < 0.05$) at 3 months in group A and B respectively. Statistically significant results were observed in the 3 month follow up visit even though it was not present in POD-1 and 1 month follow up results.

Table-11 Incidence Of Post Operative Hypoesthesia

Hypoesthesia	Group A (n=29) (%)	Group A (n=29) (%)	Group B (n=28) (%)	Group B (n=28) (%)	P Value
Follow-up at					
POD-1	17	(58.6)	19	(67.9)	0.47
1 Month	10	(34.5)	14	(50)	0.24
3 Months	8	(27.6)	11	(39.3)	0.35

In the present study the incidence of post operative groin hypoesthesia was compared between group A and group B. The results of the follow up visits are 58.6 vs 67.9% ($p > 0.05$) at POD-1; 34.5% vs 50% ($p > 0.05$) at 1 month and 27.6% vs 39.3% ($p > 0.05$) at 3 months in group A and B respectively. Here the p value was found to be insignificant ($p > 0.05$).

Table-12 Incidence Of Post Operative Numbness

Numbness	Group A (n=29)	Group A (n=29)	Group B (n=28)	Group B (n=28)	P value
Follow-up at					
POD-1	5	(17.2)	4	(14.3)	0.76
1 Month	7	(24.1)	9	(32.1)	0.50
3 Months	3	(10.3)	7	(25)	0.15

In the present study the incidence of post operative numbness was compared between group A and B. The results of the follow up visits are 17.2% vs 14.3% ($p > 0.05$) at POD-1 ; 24.1% vs 32.1% ($p > 0.05$) at 1 month and 10.3% vs 25 % ($p > 0.05$) at 3 months. The difference was insignificant (p -value > 0.05).

DISCUSSION

Chronic groin pain is a significant problem following open hernia

repair with mesh, although the pain is often mild in nature, the quality of life studies have shown that chronic pain irrespective of severity can significantly interfere with normal daily activity¹¹. Routine excision of ilioinguinal nerve in an attempt to decrease the incidence of chronic inguinodynia has been proposed by many studies, yet controversies persists. So the present study was undertaken to evaluate the effect of ilioinguinal nerve excision on post operative groin pain, hypoesthesia, and numbness. In the present study number of patients evaluated for pain, hypoesthesia, and numbness are 57, in two study groups (group A – 29 patients, and group B – 28 patients). In group A ilioinguinal nerve carefully protected throughout the operation, extreme care was taken during surgery to avoid inclusion of nerve during suturing and mesh placement. In group B the ilioinguinal nerve was excised lateral to the deep ring. The patients were followed up for assessment of pain, hypoesthesia, and numbness at POD -1, 1 month and 3 months after operation.

Results Are Compared With Other Studies Incidence Of Chronic Groin Pain

Table-13 Comparison Of Incidence Of Groin Pain With Other Studies

Studies	Dittrick M .D et al	Dittrick M .D et al	Mui et al	Mui et al	Fatemeh et al	Fatemeh et al	Pre- sent study	Pre- sent study
Group	N P n=24 (%)	N E n=66 (%)	N P n=50 (%)	N E n=50 (%)	N P n=50 (%)	N E n=50 (%)	N P n=29 (%)	N E n=28 (%)
POD-1							18 (62)	14 (50)
At 1 m	5 (21)	3 (5)	37 (78)	37 (78)			6 (55.2)	10 (35.7)
At 3 m					10 (21)	3 (6)	5 (51.7)	6 (21.4)

The above table shows the number of patients and percentage of incidence of post operative chronic groin pain in three previous studies and the present study. The incidence of post operative groin pain in the present study compared ilioinguinal nerve preservation versus routine excision of ilioinguinal nerve showing the results 62% vs 50% at POD-1 ; 55.2% vs 35.7% at 1 month comparable with study conducted by Dittrick (Dittrick M.D et al, 2004).8 and 51.7% vs 21.4% at 3 months correlates well with the study done by fatemeh (Fatemeh M.D et al, 2008).¹². Here the incidence of pain at POD-1 is not considered for post operative chronic groin pain.

Incidence Of Hypoesthesia

Table-14 Comparison Of Incidence Of Hypoesthesia

Studies	Mui et al 2006	Mui et al 2006	Fatemeh et al 2008	Fatemeh et al 2008	Present study	Present study
Group	(%) N P n= 50	(%) N E n= 50	(%) N P n=50	(%) NE n= 50	(%) N P n= 29	(%) N E n= 28
At POD-1			45 (90)	39 (78)	17 (58.6)	19 (67.9)
At 1 m	31 (66)	26 (55)	12 (24)	9 (18)	10 (34.5)	14 (50)
At 3 m					8 (27.6)	11 (39.3)

The above table shows the incidence of hypoesthesia in the present study compared with two other studies.

In the present study the incidence of post operative hypoesthesia at groin between ilioinguinal nerve preservation and nerve excision during surgery, The results obtained are 58.6% vs 67.9% at POD-1 ; 34.5% vs 50% at 1 month and 27.6% vs 39.3% at 3 months are comparable with studies conducted by Fatemeh (Fatemeh M.D et al, 2008).75 and Mui (Mui M.B et al, 2006)¹¹

Incidence Of Numbness

Table-15 Comparison Of Incidence Of Numbness

Study	Mui et al. 2006	Mui et al. 2006	Picchio et al. 2004	Picchio et al. 2004	Present study	Present study
Group	NP n=50 (%)	NE n=50 (%)	NP n=391 (%)	NE n=380 (%)	NP n=29 (%)	NE n=28 (%)
At POD-1	-	-	-	-	5 (17.2)	4 (14.3)
At 1m	16 (34)	9 (19.1)	46 (12)	54 (14)	7 (24.1)	9 (32.1)
At 3 m	-	-	-	-	3 (10.3)	7 (25)

In the present study the incidence of post operative numbness compared ilioinguinal nerve preservation versus nerve excision, results showing 24.1% vs 32.1% at 1 month is comparable with results of studies conducted by Picchio (Picchio et al, 2004)¹⁰ and Mui (Mui MB et al, 2006)¹¹

Comments

After the publication of several retrospective and prospective studies that showed an incidence of 6% to 29% for post herniorrhaphy inguinal pain.^{12,15}

Many investigators and pioneers started to establish algorithm for management of these chronic pain syndrome, others tried to define a method to prevent this complications rather than treat it. A proposed mechanism for the development of post operative chronic groin pain is inflammation and fibrosis induced by the mesh, which is in close proximity to the ilioinguinal nerve.^{12,13} In addition unintentional injury or strangulation of the nerve during suturing may also contribute to the phenomenon. There is increasing evidence to suggest that prophylactic excision of ilioinguinal nerve during open hernia repair can potentially decreases the incidence of chronic groin pain following operation.⁸ Some studies have failed to show any relationship between the division or preservation of ilioinguinal nerve and risk of developing chronic groin pain.¹⁶

Ravichandran et al in 2000⁹

One of the early studies in the fields of elective neurectomy in inguinal hernia repair was a pilot study conducted by Ravichandran et al at 2000, in which 20 patients with bilateral inguinal hernia underwent surgery with the ilioinguinal nerve being preserved on one side and divided on the other side, all of the differences in the post surgical pain and numbness between the two sides were insignificant.

Dittrick et al 2004⁸

Retrospective chart review performed by Dittrick et al 2004, on 90 patients who underwent Lichtenstein inguinal hernia repair.

The ilioinguinal nerve was excised in 66 patients and preserved in 24 patients. These investigators concluded that the incidence of neuralgia was significantly lower in the neurectomy group versus the nerve preservation group (3% vs 26% p value<0.001).

At one year post operatively the neurectomy patient continued to have a significantly lower incidence of neuralgia (3% vs 25% p=0.003). The incidence of paraesthesia in the distribution of the ilioinguinal nerve was not significantly higher in the neurectomy group (13% vs 5% , p= 0.32) at 1 year.

Mui M.D et al 2006^{15,16}

Conducted a double blinded randomized controlled trail to investigate the short to mid-term neurosensory effect of prophylactic ilioinguinal neurectomy during Lichtenstein repair of inguinal hernia. 100 male patients were randomized into two groups. Ilioinguinal neurectomy (group A). ilioinguinal nerve preserved (group B) during operation. Results concluded that the incidence of chronic groin pain at 6 months was significantly lower in the group A than group B. (8% vs 28.6%) p=0.008. No significant inter group differences were found regarding the incidence of groin numbness. Post operative sensory loss or changes at the groin region. And they postulated that the sensory loss caused by the neurectomy might be compensated by cross innervations from the collateral cutaneous nerves.

Fatemeh malekpour et al 2008¹³

Double blinded randomized controlled clinical trail was performed on 121 patients undergoing open anterior mesh repair of inguinal hernia. Of the 121 patients, 61 were nerve excision group and 60 were nerve preserving group. The chronic post surgical inguinodynia was seen in 6% in nerve excision group and 21% in nerve preserved group (p=0.033). Results were concluded that the neurectomy decreases the post surgical pain after elective inguinal hernia repair.

Picchio Marcello M.D et al, 2004¹⁵

Conducted a double blinded randomized controlled trail on 813 patients, One year after surgery pain was absent in 231 (76.5) of nerve

preserved and 213 (73%) of nerve transected patients. (difference 3.30% ; 95% confidence interval – 3.68% to 10.28%), mild pain in 55(18%) and moderate in 11 (4%) and 9 (3%), and severe in 5(2%) and 9 (3%). respectively p=55 Pearson test.

They suggested that post surgical pain after hernia repair is not affected by elective inguinal nerve division, yet sensory disturbances in the area are significantly increased.

These controversial result as well an article by Madura et al 72 reporting the effectiveness of inguinal neurectomy for ilioinguinal nerve entrapment to relieve pain in post surgical patients motivated us to study the comparison between elective ilioinguinal nerve excision versus preservation on chronic groin pain and other symptoms.

In the present study –Results

A Prospective comparative study conducted at Department of General Surgery at Government Medical College/ Krishna Rajendra Hospital ,Mysore from December 2014 to May 2016 with 3 months follow up. 57 of 60 patients who completed the study protocol fully, this includes 29 of 30 patients in group A (ilioinguinal nerve preservation) and 28 of 30 patients in group B (ilioinguinal nerve divided).

The results showed the incidence of postoperative chronic groin pain 62% vs 50% (p= 0.36) , 55.2% vs 35.7% (p= 0.14) and 51.7% vs 21.4% (p=0.02) at POD-1, 1 month and 3 months after surgery in group A and B respectively with mean severity score of 1.03+ 0.94 vs 0.96+ 0.99 ; 0.65+ 0.67 vs 0.43 + 0.63 and 1+ 1.2 vs 0.29 + 0.60 respectively.

The incidence of hypoaesthesia was 58.6 % vs 67.4 % (p=0.47) ; 34.5% vs 50% (p=0.24) and 27.6% vs 39.3% (p=0.35) in POD-1, 1 month and 3 months in group A and group B respectively.

The incidence of numbness was 17.2% vs 14.3% ; 24.1% vs 32.1% and 10.3% vs 25% at POD-1, 1 month and 3 months in group A and B respectively, (p>0.05). Thus showed the incidence of chronic groin pain is lower in ilioinguinal nerve excision (group B) compared to nerve preservation (group A) which was statistically significant (p<0.05) at 3 months follow up visit. No significant difference noted in neurosensory disturbances in either group.

CONCLUSION

In the present study 57 of 60 patients who have completed the study protocol fully, this includes 29 of 30 patients in group A (ilioinguinal nerve preservation) and 28 of 30 patients in group B (ilioinguinal nerve divided) who underwent Lichtenstein mesh hernioplasty at saraswati institute of medical sciences, Hapur.

After analyzing the data and observations.

The present prospective comparative study demonstrated that the prophylactic excision of ilioinguinal nerve during Lichtenstein mesh hernia repair decreases the incidence of chronic groin pain after surgery. Furthermore the procedure is not significantly associated with additional morbidities in terms of local cutaneous neurosensory disturbances.

However the sample size and the follow up period in the current study is relatively short , A larger study sample and longer follow-up may be needed before any further conclusion can be made.

Although the study sample and follow period is short in this present study than reported by many previous studies it is still wise to recommend ilioinguinal neurectomy in patients undergoing anterior inguinal hernia mesh repair. So when performing Lichtenstein inguinal hernia repair, routine ilioinguinal neurectomy is a reasonable option.

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Conflict of Interest- Nil.

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