

Hernia Associated Nerve Damage Fits With the Surgery Literature

Two prospective randomized studies show routine Inguinal nerve removal prevents post-operative hernia pain.

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<thead>
<tr>
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<th>Nerve Preserved</th>
<th>Nerve Removed</th>
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<tbody>
<tr>
<td>Dittrick–Baylor (04)</td>
<td>26%</td>
<td>3%</td>
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<tr>
<td>Mui–Hong Kong (06)</td>
<td>28%</td>
<td>8%</td>
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In those who suffer chronic post-operative hernia pain, two studies demonstrate nerve removal alleviates chronic pain.

This pilot study has spawned a larger prospective study at the Melbourne Hernia Center in Australia.

Special thanks to Larry O’Bryant, MD and Eric Arnston, MD for their pathology insights.

Thank you for the opportunity to care for your patients, and help unlock the problem of hernia pain.

This data was presented at the American Hernia Society; and full paper is being submitted to the journal Hernia.

* The nerves cannot be assessed by laparoscopic hernia repair

Robert Wright, MD, FACS
Meridian Surgery Center
As presented to the American Hernia Society

Ouch!!

Traumatic Neuroma

Inguinal Hernia Damages Nerves
- Compression
- Stretch

Open Hernia Repair Allows
- Nerve Assessment
- Nerve Removal

Lower Post-op Pain!

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INGUINAL HERNIA CAUSES TRAUMATIC NEUROMA

Of Ilioinguinal Nerve

Traumatic Neuroma (right) nerve twice normal diameter

- Present in 34% of repairs

OBJECTIVE:

Establishing the existence of traumatic neumata (TN) in primary inguinal hernia.

METHODS:

A retrospective chart review of 100 primary inguinal hernia repairs by Lichtenstein technique and 10 recurrent inguinal hernia repairs by open technique in the same time segment were reviewed. Nerves suspected of containing a neuroma were sent for histological examination. Objective clinical parameters, nerve pathology reports, and neuroma location were noted. An outside biostatistician was also utilized to evaluate the data for relative trends.

RESULTS:

The incidence of TN is 34% in primary inguinal hernia repair. In recurrent inguinal hernia repair TN occurs in 50% of repairs. No individual clinical parameters were statistically significant in predicting the presence of neuroma. The nerve most affected in both primary and recurrent open repairs was the ilioinguinal nerve; it had an incidence rate of 88% and 80% respectively. The location of these neuromas was mainly at the external oblique neuroperforatum — where the nerve pierces the external oblique, accounting for 83% in primary repairs, and 80% in recurrent repairs. Of the 35 nerves suspected of containing neuroma, histology confirmed TN in 34. There is a confidence interval of 90% that the probability of a patient with an inguinal hernia will have nerve involvement between 30% and 46%. There is a 99% confidence interval that the ilioinguinal nerve will be involved if a hernia patient has nerve involvement.

CONCLUSION:

The overall incidence of TN in primary inguinal hernia repair is 34% and can be expected in recurrent hernias at a higher rate. The ilioinguinal nerve is most commonly affected in both primary and recurrent inguinal hernia, and is most likely to occur at the external oblique neuroperforatum. The high incidence of neuromas reported here suggests that surgeons would be well advised to carefully examine the ilioinguinal nerve at the external oblique neuroperforatum during surgery to look for pre-existing TN.

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