

Peripheral Nerve Injuries after Orthopedic Procedures

The Effect of Nerve Decompressions on Pain and Quality of Life

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BACKGROUND

- Peripheral nerve injuries (PNI) are rare complications after orthopedic procedures and arthroplasties, occurring in up to 7% of cases. PNIs can result in loss of function, sensory disturbances and chronic pain
- Treatment options depend on the time of presentation and include nerve transfers and nerve decompressions

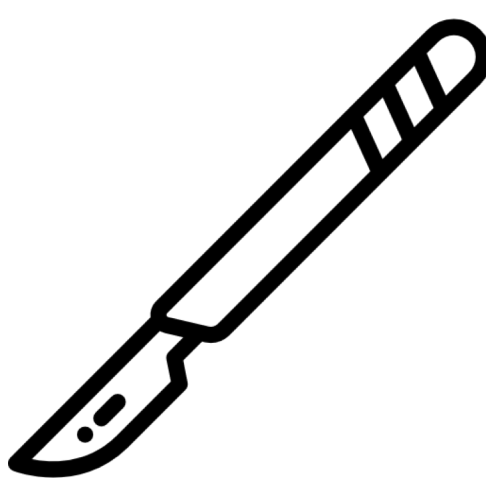
AIM OF THIS STUDY

- To evaluate the presentation of PNIs after orthopedic procedures and arthroplasties and provide options to improve pain

METHODS



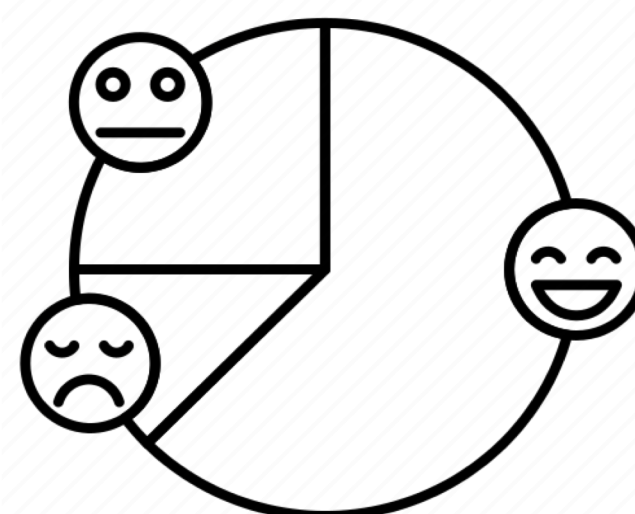
Retrospective
Review



Patients with PNI
after Orthopedic
Procedures



Extracted Patient
Characteristics
and Surgical
Procedure



Visual Analog
Scale (VAS)

RESULTS

PNIs in 43 patients.

Of these, PNIs after 18 arthroplasties:



10 Patients after
Total Hip
Arthroplasty



4 Patients after
Total Shoulder
Arthroplasty



4 Patients after
Total Knee
Arthroplasty

- All surgeries were outpatient. No 30-day complications.
- Nerve transfers were performed in **3 cases**
- Nerve decompressions were performed in **25 cases**
- Combined treatment in **11 cases**

- Average time to presentation at nerve clinic: **19.06 months**
- Average follow-up time: **7.9 months**

	N	Pre-operative mean (SD)	Post-operative mean (SD)	p-value
Average pain in past month	36	5.42 (2.38)	3.44 (2.25)	p < 0.0001
Worst pain in the past month	36	6.85 (3.00)	5.41 (2.85)	p = 0.01
Depression score in past month	35	3.86 (3.42)	2.48 (3.05)	p < 0.0001
Frustration score in past month	27	7.04 (3.05)	3.27 (3.53)	p = 0.01
Effect of pain on quality of life	32	7.29 (3.15)	4.05 (3.52)	p < 0.0001

CONCLUSIONS

- PNIs after orthopedic procedures are uncommon, however, could be devastating to a patient's quality of life
- Nerve decompressions significantly decrease pain, frustration and depression scores, improving quality of life
- Collaboration between plastic surgeons and orthopedic surgeons is essential to improve quality of life in this patient population