Superior Cluneal Nerve Entrapment Syndrome is a Cause of Chronic Pain in Adolescents

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Introduction

- **Superior Cluneal Nerve Entrapment Syndrome (SCNES) is a known cause of low back pain (LBP)[1,2] in adults but has rarely been documented in adolescents and young adults.**
- **SCNES has been treated effectively with surgical nerve decompression in adults.**

Hypothesis

- **Surgical decompression will effectively treat chronic LBP in adolescents with SCNES.**

Methods

- **Retrospective review of pediatric patients undergoing cluneal nerve decompression (CND) by a single pediatric orthopedic surgeon from January 2017 to December 2020.**

Table 1. Study Subjects Pre-op data

Age (years)	Sex	Body Mass Index	Athlete	Pain Score	Pain Chronicity
16	M	29	Yes	5	< 1 year
18	M	35	-	-	> 1 year
23	M	36	-	6	< 1 year
17	F	44	No	8	< 1 year
14	F	41	No	4	< 1 year
16	F	47	Yes	-	< 1 year
19	F	23	-	5	> 1 year
14	F	27	-	9	< 1 year
20	F	35	-	4	< 1 year
16	F	37	No	5	< 1 year
18	F	22	Yes	3	> 1 year
15	F	24	Yes	4	< 1 year
17	M	25	-	9	< 1 year
16	F	15	No	-	< 1 year
16	F	18	Yes	7	> 1 year
17	M	23	Yes	8	> 1 year
14	F	30	Yes	7	> 1 year
16	F	28	Yes	7	< 1 year
16	F	19	Yes	4	> 1 year
16	F	31	-	-	< 1 year
13	F	29	Yes	4	< 1 year
18	F	20	-	5	< 1 year
17	F	21	Yes	9	< 1 year
15	F	21	No	5	> 1 year

Results

- **Median Age 16 (range 13-23) , 5 Male, 19 Female (N=24)**
- **8 patients had chronic pain > 1 year**
- **All but one of the 16 subjects with both pre- and post-op data had improved pain on initial post-op follow-up.**
- **At latest follow-up, 1 patient subjectively reported the same pain prior to surgery and 2 subjectively reported worse pain.**
- **Complications included numbness in 8 patients mainly around the incision site, but some from injury to the superior cluneal nerve.**

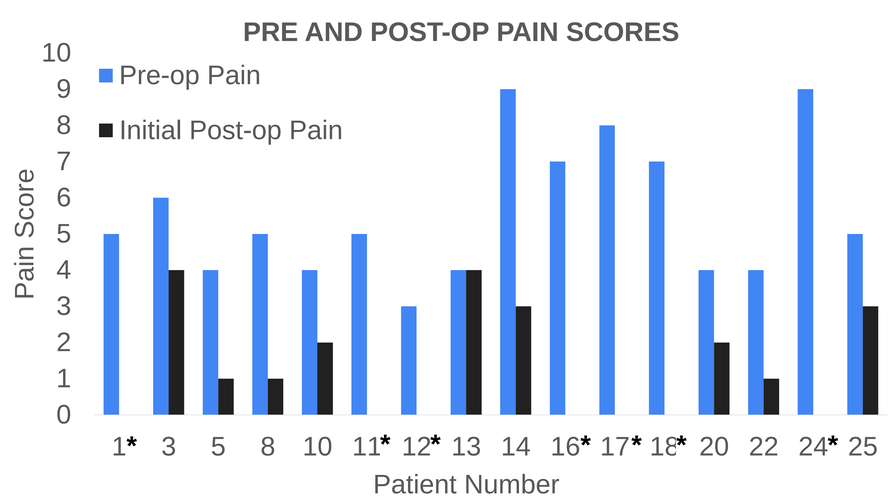

Figure 1. Patients with missing data were excluded from figure.
*** Patients with initial Post-op Pain score of 0**

Conclusion

- **Surgical decompression is an effective treatment for chronic LBP in adolescents with SCNES.**

References:

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