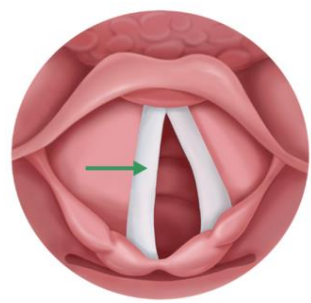


# Does Recurrent Laryngeal Nerve Monitoring Even the Playing Field?

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## Introduction

- Thyroidectomy is generally safe; most common complications:



RLN Injury



Hematoma and Respiratory Distress

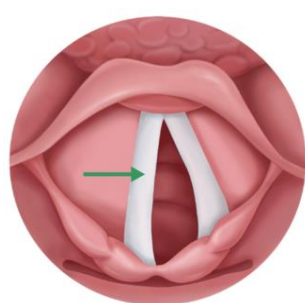


Hypocalcemia

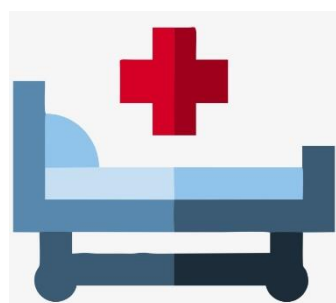
- Junior surgeons have a higher rate of complications
- RLN monitoring (RLNM) has been shown to be an effective mitigation strategy
- Aim: Determine the effect of RLNM on complications between surgeons of varying experience**

## Methods

- Retrospective review from 2015-2023 of patients from an endocrine surgery center
- Patients who had RLNM were compared to those who did not
- Outcomes studied:



RLN Injury and Hoarseness



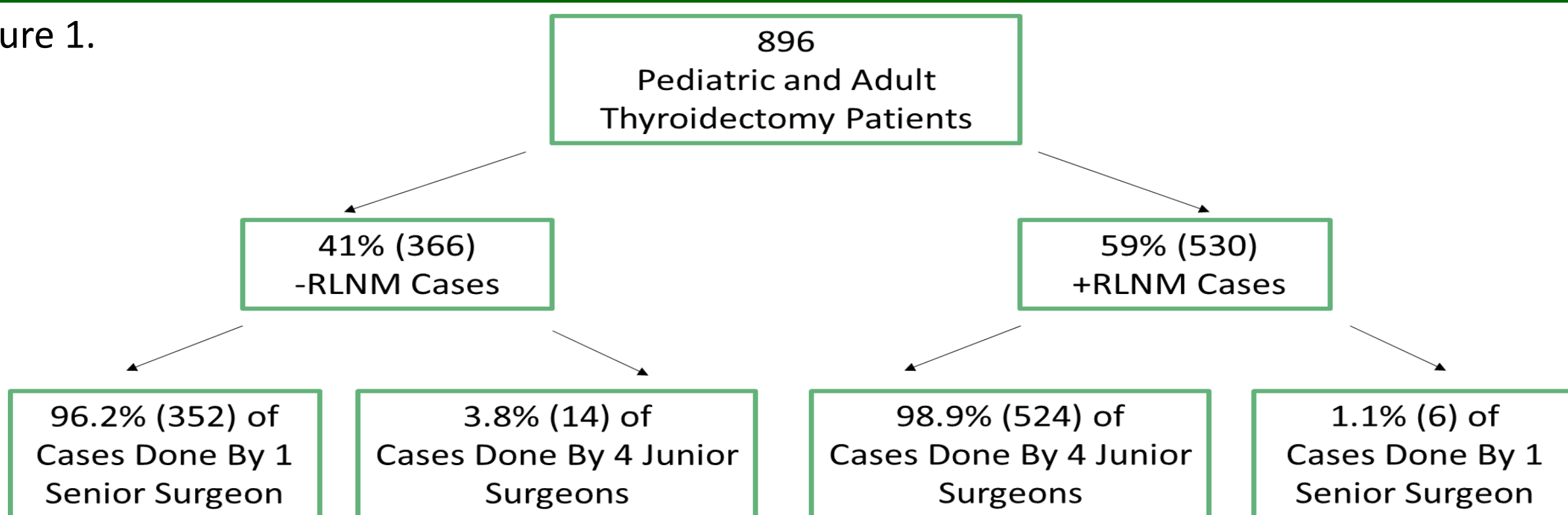
ED Visits



Major Complications

## Results

Figure 1.



No differences in demographics, number of re-operative cases, or number of cancer cases between both groups

Table 1.	- RLNM N=360 Nerves at Risk 572 (%)	+ RLNM N=530 Nerves at Risk 852 (%)	p-value
Unintentional RLN Transection	1 (0.2)	5 (0.6)	0.15
Transient Hoarseness	42 (7.3)	44 (5.2)	0.09
Permanent Hoarseness	0 (0)	2 (0.2)	1

Table 2.	- RLNM N=366	+ RLNM N=530	p-value
Major Complications Overall	11 (3.0)	16 (3.0)	0.99
ED Visits Overall	33 (9.0)	32 (6.0)	0.09
Hypocalcemia	7 (1.9)	8 (1.5)	0.79
Hematoma	3 (0.8)	0 (0.0)	0.07
Respiratory Distress	2 (0.5)	6 (1.1)	0.48
Other	21 (5.7)	18 (3.4)	0.1

## Conclusions

- The rates of RLN transection, hoarseness, ED visits, and major complications did not differ between the two groups
- The use of RLNM during thyroidectomy allows junior surgeons to achieve similar outcomes as senior surgeons