

Cleft Lip Repair Comparison between Inpatient and Outpatient Surgeries: A Multi-surgeon Experience

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Introduction

Great variability exists as to whether cleft lip (CL) repair is performed as an inpatient or outpatient surgery. Previous studies have examined the safety of performing CL repair as an outpatient procedure. This study's aim is to investigate the authors' institutional experience with CL repair to evaluate if there is an increase in complications, emergency department (ED) visits, or readmissions to the hospital when performing CL repair in an outpatient setting.

Methods

This study reviewed patients under one year of age who underwent CL repair between 2012 and 2023 at the authors' institution. Data collected included patient demographics, perioperative details, ED visits and readmissions within thirty days of surgery, and complications.

Purpose

Expand on safety of ambulatory cleft lip repairs after careful patient selections at a single cleft center.

Results

	Inpatient	Outpatient	P
Return to ER	6.5%	7.9%	.767
Readmission	4.6%	7.9%	.447
Postoperative Complications	29.6%	26.3%	0.698
Bilateral CL	34.3%	5.3%	.001
Had comorbidity (GI)	11.1%	2.6%	0.114
Had comorbidity (HEMATOLOGIC)	6.5%	2.6%	0.370
Had comorbidity (RESPIRATORY)	4.6%	5.3%	0.875
Had comorbidity (ANY)	38%	39.5%	.869
Had Cleft Palate	81.1%	50%	<0.0001
Had Genetic Abnormality	13.9%	5.3%	.154
Weight average (kg)	5.61	6.08	.033
Gestational age (average weeks)	37.99 weeks	37.53 weeks	.192

Table 1. Patient outcomes after outpatient and inpatient surgery

	Yes, readmitted	No, were not readmitted	P
Postoperative Complications	87.5%	25.4%	<0.001
Bilateral CL	50%	25.4%	.126
Had comorbidity (GI)	37.5%	7.2%	0.003
Had comorbidity (HEMATOLOGIC)	25%	4.3%	0.013
Had comorbidity (RESPIRATORY)	25%	3.6%	0.006
Had comorbidity (ANY)	50%	37.7%	.486
Had Cleft Palate	87.5%	72.1%	0.340
Had Genetic Abnormality	25%	10.9%	.226
Weight average (kg)	5.03	5.77	.086
Gestational age (average weeks)	36.13	37.98	0.005

Table 3. Patient characteristics and Hospital readmission rates

	Yes, Returned to ER	No, did not Return to ER	P
Postoperative Complications	60%	26.5%	.024
Bilateral CL	20%	27.2%	.619
Had comorbidity (GI)	20%	8.1%	.202
Had comorbidity (HEMATOLOGIC)	10%	5.1%	.515
Had comorbidity (RESPIRATORY)	10%	4.4%	.425
Had comorbidity (ANY)	40%	38.2%	.912
Had Cleft Palate	90%	71.6%	.208
Had Genetic Abnormality	10%	11.8%	.867
Weight average (kg)	5.46	5.75	.448
Gestational age (average weeks)	37.5 weeks	37.9 weeks	.507

Table 2. Patient characteristics and Emergency Room visits

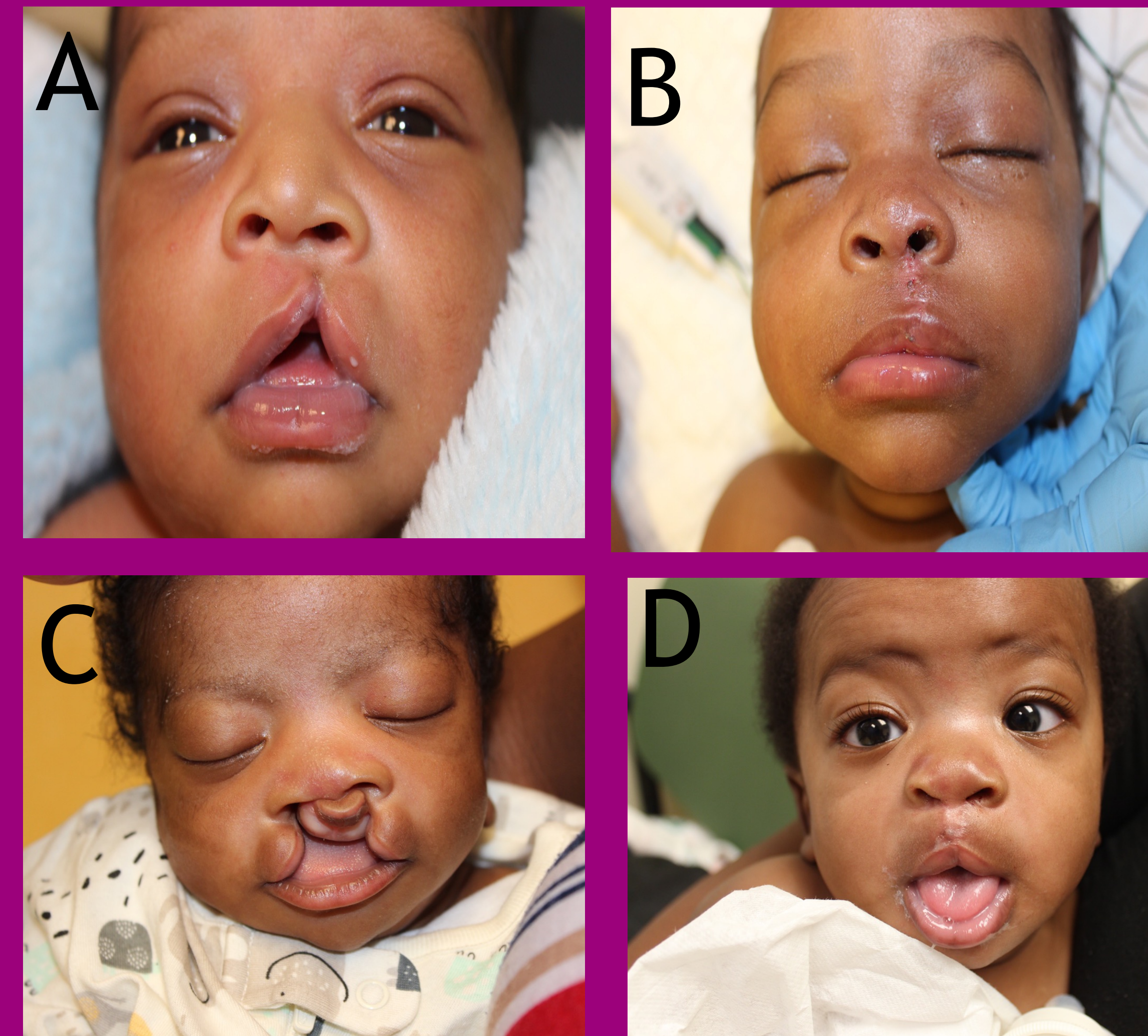


Fig 1A&C Cleft lip B&D. Cleft lip repair

Key Results

- Patients with comorbid conditions were more likely to be readmitted
- Younger GA was associated with increase readmission

Results

145 patients met inclusion criteria. When the surgery was performed as outpatient, there was no significant difference in returning to the ED ($p = 0.767$) or thirty-day hospital readmission ($p = 0.447$) compared to those who were performed as an inpatient. **Ambulatory patients did not have more postoperative complications** ($p = 0.698$) than inpatients. Bilateral cleft lips were more likely to be performed in the inpatient setting ($p = 0.001$). Patients selected for inpatient surgery had a significantly lower weight at time of repair ($p = 0.033$). Patients with a respiratory ($p = .006$), gastrointestinal ($p = 0.004$), or hematologic ($p = 0.013$) comorbidity had a higher readmission rate. Patients were also significantly more likely to be readmitted if they had a younger gestational age at birth ($p = 0.005$).

Conclusion

There was no increased return to ED or readmission for patients undergoing inpatient versus outpatient cleft lip repair. CL repair can be performed safely in an outpatient setting with careful patient selection.

Contact

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