



Same Day Discharge For Laparoscopic Heller Myotomy

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Introduction:

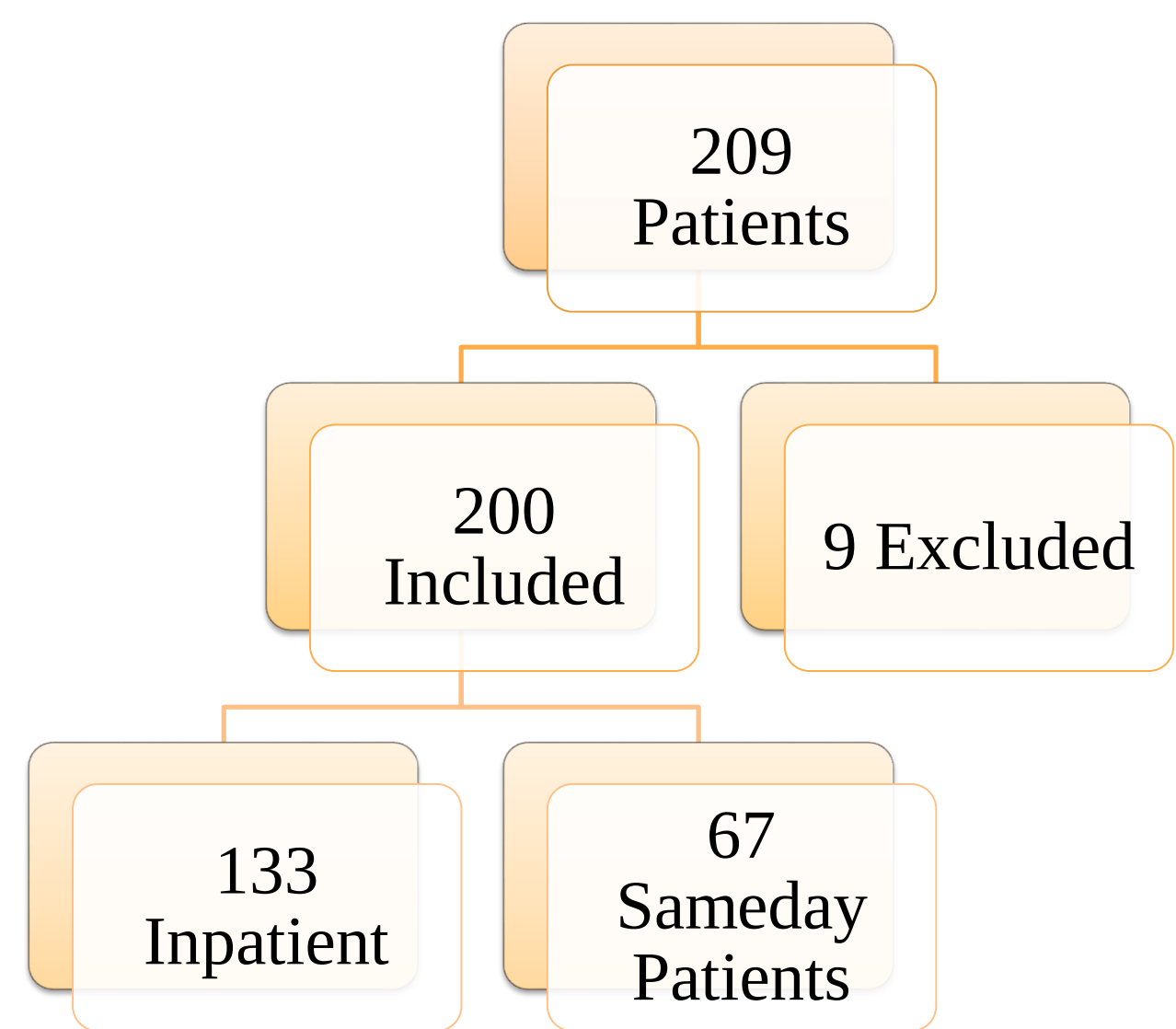
- Heller myotomy is one of the standard procedures for the treatment of Esophageal Achalasia.
- In the era of the laparoscopic surgery, as well as better anaesthesia and pain control, and enhanced recovery after surgery , Same day surgery has been demonstrated to be safe in many general surgery procedures.
- Limited data are available on the safety and efficacy of same day surgery for Heller myotomy.

Objective:

- This study aimed to describe the experience with same day discharge after laparoscopic Heller myotomy at one hospital .

Method:

- A retrospective cohort study including all patients underwent laparoscopic Heller myotomy between 2007 to 2016 at University Health Network, Toronto, Canada .
- Planned same day discharge patients were compared to planned inpatient with respect to post op complications, length of stay and number of emergency visits.
- The two groups were compared in respect to post op complications, length of stay and number of emergency visits within 30 days of the surgery.



Reasons for excluding:

- Procedure miscoding (1)
- Patient did not have achalasia (4)
- Patient was scheduled but did not have a laparoscopic Heller myotomy (4)

Results:

- 87.2% of the inpatient group had comorbidities and 74.6% of the same day surgery group had comorbidities (P=0.025).
- The average length of stay for the inpatient group was 3.5 days.
- Among the same day surgery group, 15 had an unplanned admission following surgery (22%). Of those who were admitted, the average length of stay was 1.3 days .
- Only one patient in same-day discharge group was readmitted after hospital discharge while 4 in inpatient group were readmitted .
- The post-operative complication rate was 20 (15%) of inpatient compared to 4 (6%) of same day discharge (P=0.06).
- Rates of emergency room visits within 30 days following surgery were 7 (5.3%) in the inpatient group and 3 (4.5%) in the same-day group (P=0.80) .
- The most common reason for an ER visit within 30 days post-op was abdominal pain.
- There was one mortality case in inpatient group due to a post-operative complication.

Patient Data	Column	n	%
Sex	Male	98	49.00%
	Female	102	51.00%
Age	Average Age	47.74	
	Median Age	48	
	Range	16-84	
Weight	Average Weight (kg)	73.3	
	Median Weight (kg)	71.8	

Discussion:

- This study is a large series of same day surgery for achalasia compared to inpatients.
- There appear to be few serious complications overall associated with laparoscopic Heller mytotomy. Same-day surgery showed less complication than the inpatients surgery patients although it was statistically not significant.
- It demonstrated the feasibility and safety of day surgery with no significant difference in terms of postoperative complications, readmission or emergency room visits. This is evident by low complication rate and very few visits to the emergency department.
- Adopting same day surgery lower the cost of the hospital and improve patient satisfaction. This study open the door for more procedure to be done as an outpatient.

Patient Data	Column	n	%
Comorbidities	None	34	17.00%
	Hypertension	41	20.50%
	Coronary artery disease	13	6.50%
	Chest Pain/Angina	25	12.50%
	Diabetes	17	8.50%
	Stroke	3	1.50%
	Trouble Breathing	33	16.50%
	Lung Disease	12	6.00%

Patient Data	Column	n	%
Comorbidities	Asthma	24	12.00%
	Kidney Disease	10	5.00%
	Liver Disease, Hepatitis, Cirrhosis	10	5.00%
	Cancer	5	2.50%
	GERD	118	59.00%
	Thyroid Disease	24	12.00%
	Other	79	39.50%

Conclusion:

- Same day surgery is feasible for laparoscopic Heller myotomy, with a similar complication and readmission rate as inpatient surgery .

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