

BACKGROUND

Laparoscopic appendicectomy has become the gold standard for patients with acute appendicitis. Evidence shows patient with uncomplicated appendicectomies can be treated as a day case safely.

AIM

- To decrease length of stay post laparoscopic appendicectomy
- To assess the effectiveness of several quality measures by comparing outcomes before and after implementation across a period of 3 years.
- To identify characteristics of patients with a length of stay less than 24 hours.

METHODS

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CONCLUSION

- The length of stay reduced following the implementation of quality improvement measure.
- Characteristics of patients with a short length of stay were described and hence patients that can be identified to be put on the day case laparoscopic appendicectomy pathway.

RESULTS

Average LOS decreased from 2.3 days to 1.9 days, patients with less than 24 hour LOS had an average ASA grade of 1.4, mean age of 33.2 years, mean duration of operation of 62.5 minutes and mean WCC and CRP of 11.5×10^6 and 19 respectively

Table 1. Demographics by LOS category

Variable	LOS 0-1 (n=98)	LOS 2-3 (n=123)	LOS >3 (n=27)	p-value for the diff between groups*
ASA, n (%)				
1	53 (54.1)	66 (53.7)	8 (29.6)	0.0004
2	43 (43.9)	53 (43.1)	13 (48.1)	
3	2 (2)	4 (3.3)	5 (18.5)	
4	0	0	1 (3.7)	
Age, mean (SD)	34.76 (15.22)	34.18 (16.24)	46.85 (20.97)	0.0012
Over 60, n (%)	5 (5.1)	11 (8.9)	9 (33.3)	0.00008
Gender, n(%)				
Males	48 (49)	53 (43.1)	10 (37)	0.4733
Females	50 (51)	70 (56.9)	17 (63)	
LOP, mean (SD)	61.53 (23.93)	67.93 (23.11)	81.33 (32.21)	0.0009
WCC, mean (SD)	12.36 (3.80)	12.59 (4.48)	13.52 (4.85)	0.462
CRP Tertiles, n (%)				
Low, ≤13	38 (40)	40 (32.5)	4 (14.8)	0.0002
Medium, 14-58	36 (37.9)	43 (35)	4 (14.8)	
High, >58	21 (22.1)	40 (32.5)	19 (70.4)	
CT scan performed, n (%)	32 (32.7)	50 (40.7)	18 (66.7)	0.0061
CT-confirmed appendicitis, n (%)	31 (31.6)	48 (39)	15 (55.6)	0.0714

RECCOMENDATIONS

- Establishment of Laparoscopic training sessions.
- A dedicated theatre slot –'GOLDEN PATIENT' for day case appendicectomy.
- Early discharge planning.
- Establishment of a dedicated day case post-operative ward for faster recovery and early discharge of patient
- Patients with a crp <58 & an operation time of an hour or less could be candidates for a day case appendectomy