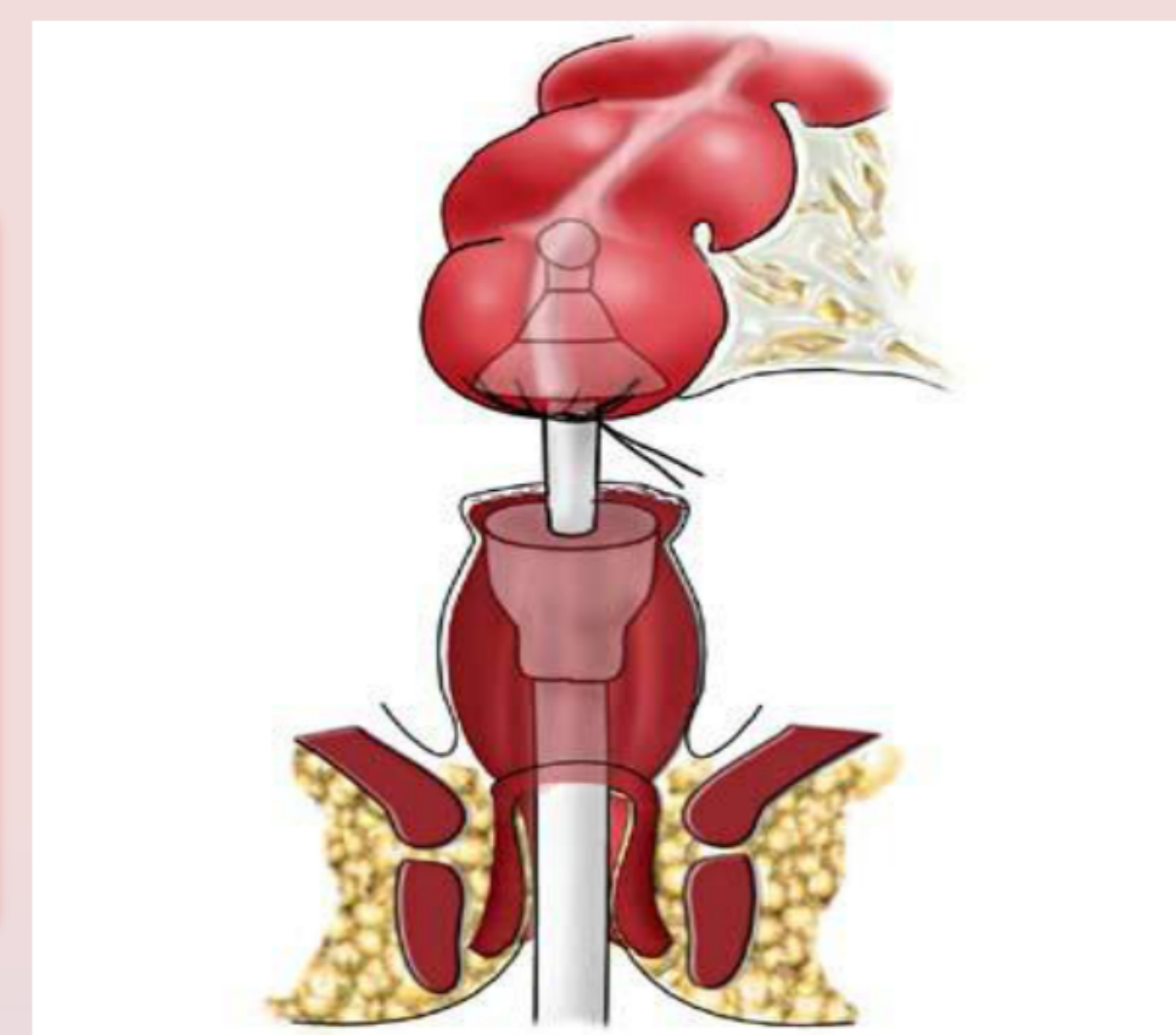


Anastomotic leakage in patients operated for colorectal cancer in a high volume UK centre within an enhanced recovery programme setting

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Introduction

Anastomotic leak is one of the serious complications in colorectal cancer surgery. It is associated with reduced 5-year cancer-specific survival, higher recurrence, a source of morbidity and mortality (20 to 23%) with an extra cost to healthcare: £1 million - £3.5 million annually. Law WL et al found that anastomotic leak was an independent factor for a higher local recurrence rate in rectal cancer. The purpose of this study was to determine the anastomotic leakage in a high volume centre in the United Kingdom with an established laparoscopic and enhanced recovery programme. Recommended targets by the ACPGIBI 2007 are 8% overall for anterior resection and 4% for other resections.

Large scale regional audits

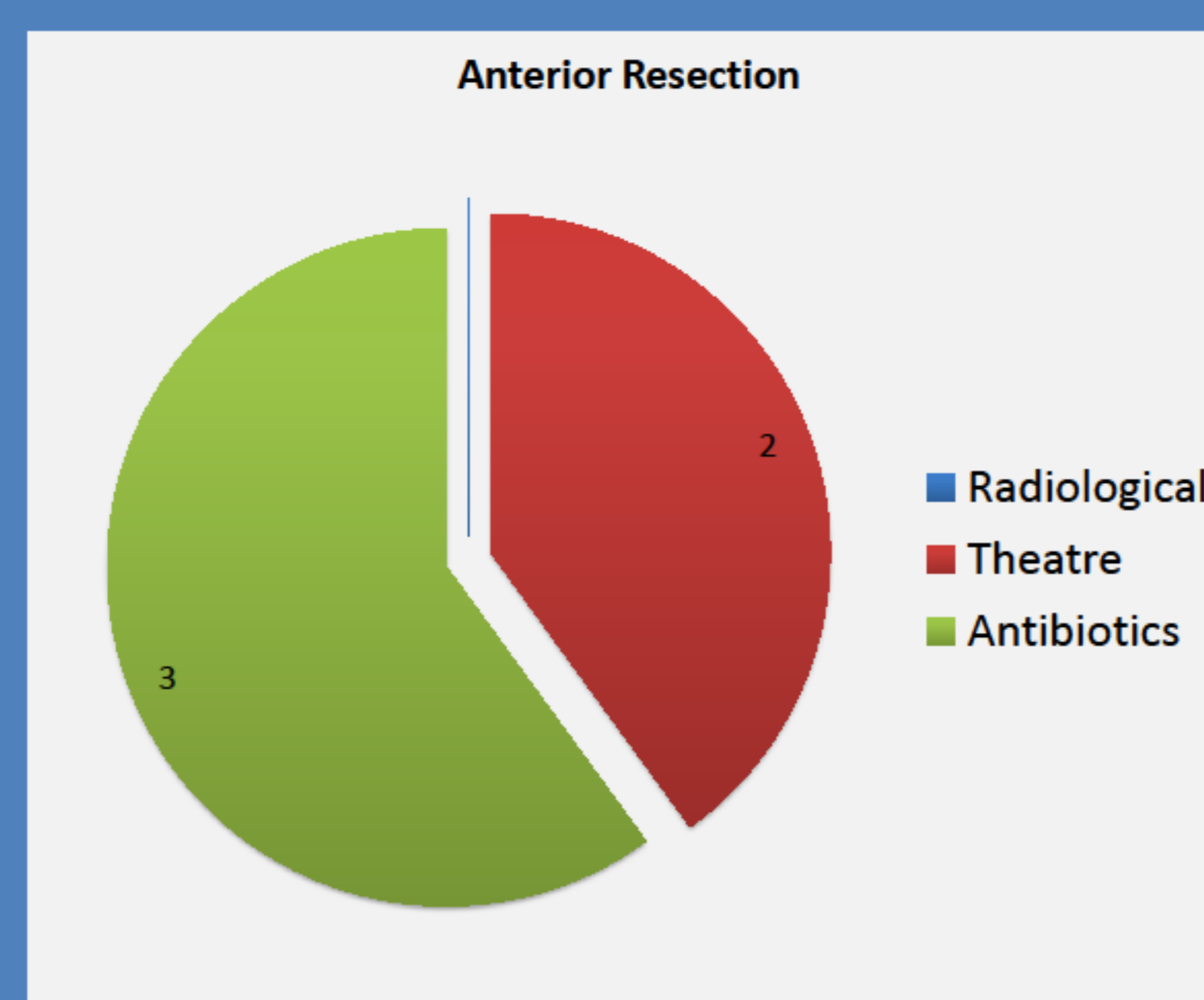
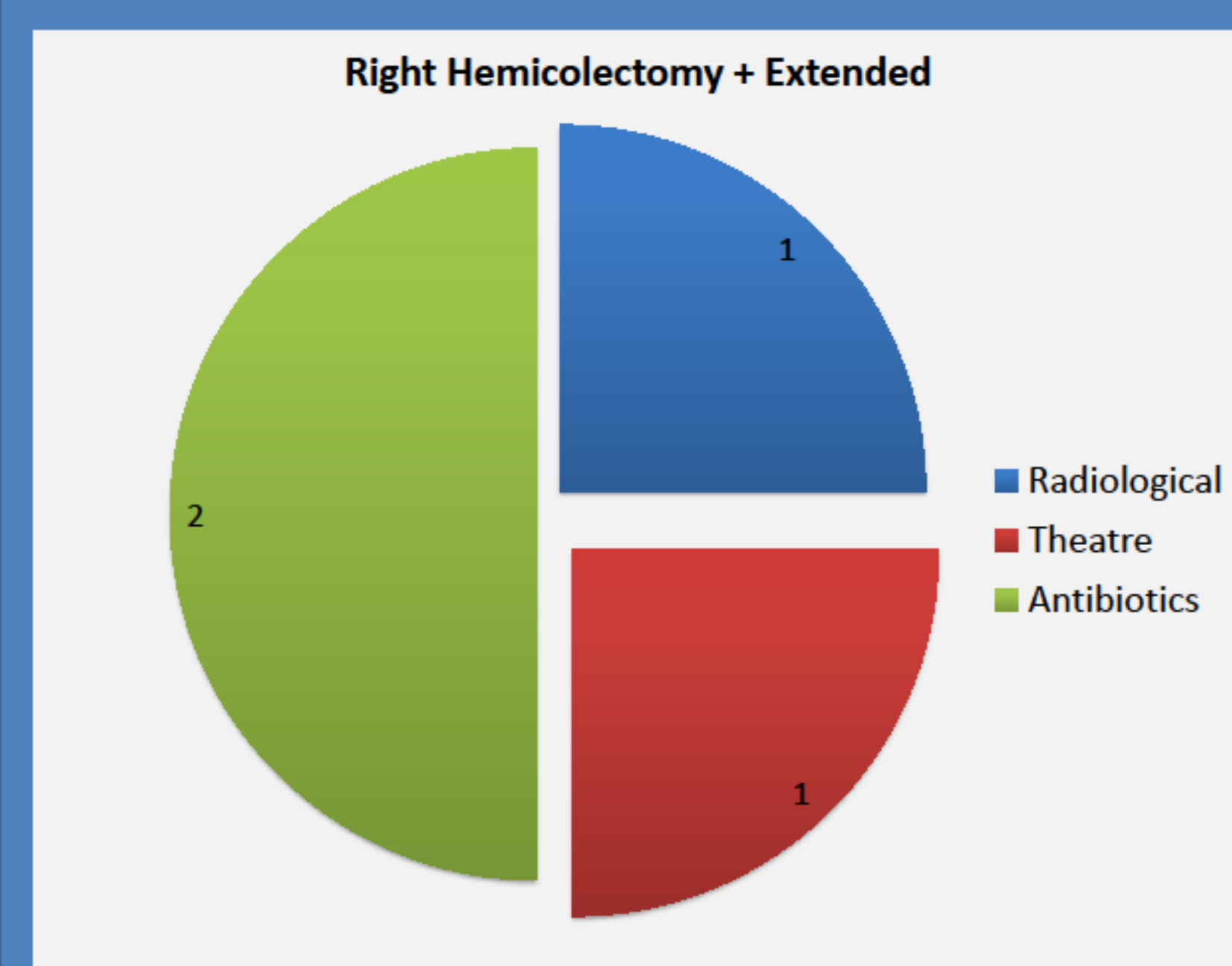
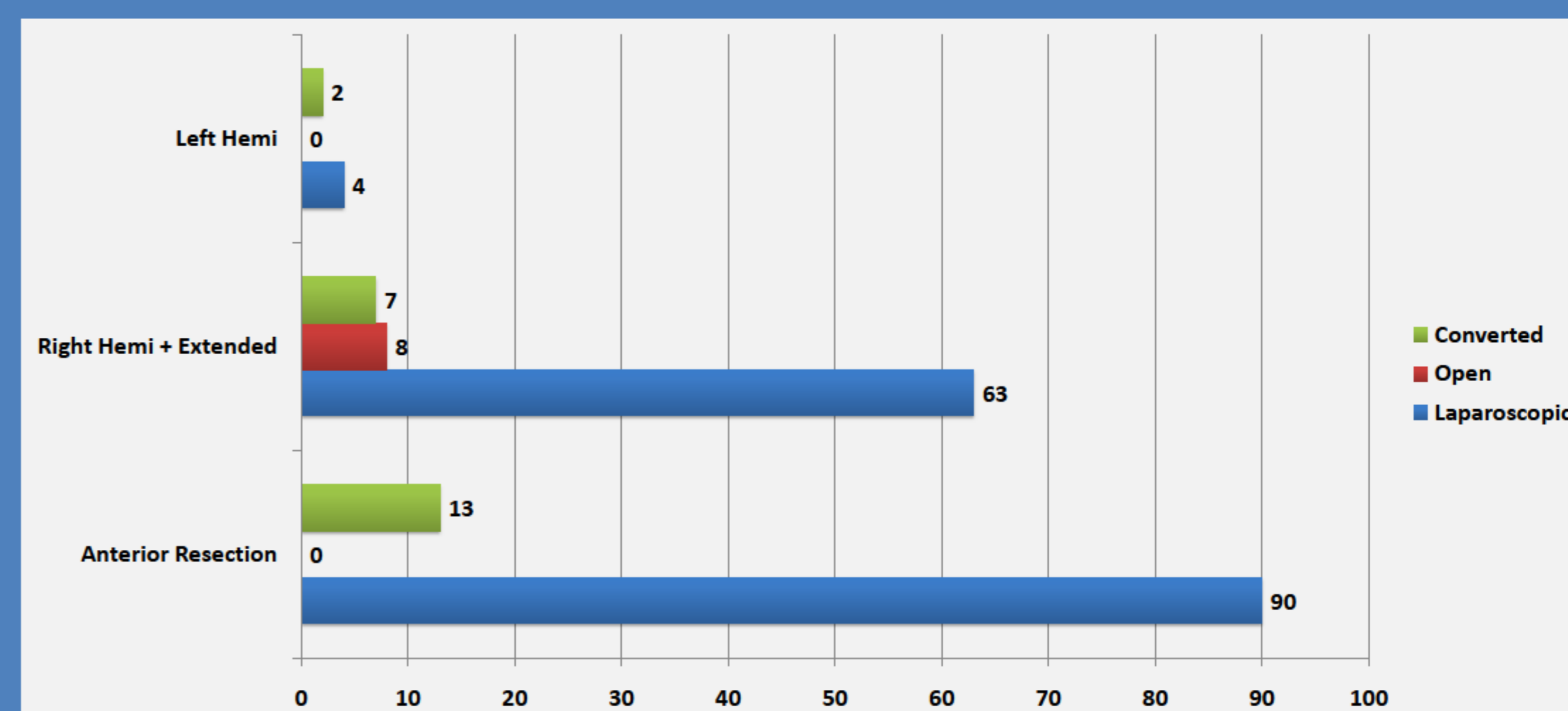
	Overall	Anterior resection	Other colonic
Trent/Wales Audit	4.9%	7.4%	3.7%
The Wessex Audit	3.4%	6.9%	2.6%
NORCCAG Study	2.9%	6.0%	4.1%

Methods

A retrospective analysis of patients undergoing colorectal cancer resections in our hospital was performed from 2013 to 2014 from a prospectively maintained enhanced recovery database. Anastomotic leak was defined as requiring further clinical intervention (antibiotics +/- radiological drainage +/- surgery) AND confirmed radiologically.

Results

	Laparoscopic	Open	Converted	Leak	Total	%
Anterior Resection	90	0	13	5	103	6
Right Hemicolectomy + Extended	63	8	7	4	78	3.8
Left Hemicolectomy	4	0	2	0	6	0
Total	157	8	22	9	187	4.8



Outcome (Hospital Stay)

Length of stay	2 - 36 days	
Mean length of stay	10 days	
Median length of stay	7 days	
Average length of stay	Leak: 15	No Leak: 9
Mortality	0	

Conclusions and Discussion

Leak rates for both anterior resection and other colonic resections are below recommended targets by ACPGIBI. Based on this data a safe service can be provided in a high volume centre with a high provision of laparoscopic resections within an enhanced recovery programme. The study was limited by a small sample size and short time span. We recommended that a local database be maintained with real time monitoring of leak and to use a single standard definition of anastomotic leak.

Local leak rates vs. recommended targets

	WRH over 12 months	Regional audits
Overall leak rate	4.8%	2.9% - 4.9%
Anterior resection	6.0%	6.0% - 7.4%
Other colonic	3.8%	2.6% - 4.1%

References

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