

Supplementary Search Strategy

- 1 (emergenc* or acute* or urgen* or 'non-elective' or 'non elective').tw.
- 2 ((sigmoid* or transverse or descend* or cecum* or bowel* or intestin* or mesocol* or ileostom* or colo* or rect* or anus or anal or subtotal) adj3 (colectom* or open or resect* or surg* or robot* or excision or laparoscop* or procedure* or operat* or transect* or treatment* or intervention* or anastomosis)).tw.
- 3 exp colorectal surgery/ or exp colectomy/ or exp Intestinal Obstruction/ or exp Colorectal Neoplasms/ or Colonic Neoplasms/ or exp Rectal Neoplasms/ or exp Intestinal volvulus/ or exp Diverticulitis, Colonic/ or exp Anastomosis, Surgical/ or exp Decompression, Surgical/
- 4 ((colon* or colorect* or intestin* or sigmoid*) adj3 (carcinom* or neoplas* or adenocarcinom* or cancer* or tumor* or tumour* or sarcom* or adenom* or malignan* or polyp* or lesion*)).tw.
- 5 2 or 3 or 4
- 6 (('on-table' or 'on table' or intraoperative or 'intra-operative' or intracolonic or 'intra-colonic' or colon*) adj3 (lavage or wash-out* or irrigation* or cleans*)).tw. or exp Therapeutic Irrigation/ or exp Intraoperative Care/
- 7 1 and 5 and 6

Supplementary Table 1 Summary of included articles

Ref.	Country of origin	Study design	Control intervention	Number of patients undergoing IOCL	Number of patients undergoing control intervention	Indications for emergency surgery	Quality assessment (Newcastle Ottawa scale)
Mohamed <i>et al</i> ^[24] , 2018	Egypt	Prospective Single Arm	-	26	-	Diverticulitis, Cancer, Volvulus	5/9
Awotar <i>et al</i> ^[43] , 2017	China	Prospective Cohort	Hartmann's Procedure	18	41	Cancer	8/9
Kassem <i>et al</i> ^[4] , 2017	Egypt	Prospective Cohort	Manual Decompression	104	108	Diverticulitis, Cancer, Volvulus	8/9
Han <i>et al</i> ^[40] , 2010	China	Prospective Single Arm	-	25	-	Cancer	4/9
Ortiz <i>et al</i> ^[49] , 2009	Spain	Prospective Cohort	Without IOCL	61	41	Diverticulitis, Cancer, Volvulus,	7/9

							Others	
Zhuang <i>et al</i> ^[33] , 2009	China	Retrospective Single Arm	-	34	-	-	Cancer	5/9
Peng <i>et al</i> ^[38] , 2008	China	Prospective Single Arm	-	23	-	-	Cancer	5/9
Oren <i>et al</i> ^[42] , 2007	Turkey	Retrospective Cohort	Hartmann's Procedure	75	146	-	Volvulus	6/9
Liu <i>et al</i> ^[37] , 2007	China	Prospective Single Arm	-	75	-	-	Cancer	5/9
Poskus <i>et al</i> ^[41] , 2006	Lithuania	Retrospective Cohort	Without IOCL	59	49	-	Cancer	7/9
Du <i>et al</i> ^[39] , 2006	China	Prospective Single Arm	-	22	-	-	Cancer	4/9
Edino <i>et al</i> ^[25] , 2005	Nigeria	Prospective Single Arm	-	32	-	-	Cancer, Volvulus, Others	5/9
Lim <i>et al</i> ^[50] , 2005	Singapore	Randomised Controlled Trial	Manual Decompression	24	25	-	Cancer	-*
Villar <i>et al</i> ^[48] , 2005	Spain	Prospective Cohort	Without IOCL	19	16	-	Cancer	7/9

Zhou <i>et al</i> ^[35] , 2005	China	Prospective Single Arm	-	25	-	Cancer	4/9
Chen <i>et al</i> ^[36] , 2004	China	Retrospective Single Arm	-	32	-	Cancer	5/9
Regenet <i>et al</i> ^[10] , 2002	France	Prospective Cohort	Hartmann's Procedure	27	33	Diverticulitis	6/9
Ma <i>et al</i> ^[32] , 2001	China	Prospective Single Arm	-	27	-	Cancer	4/9
Biondo <i>et al</i> ^[26] , 2000	Spain	Prospective Single Arm	-	61	-	Diverticulitis, Cancer, Others	4/9
Forloni <i>et al</i> ^[6] , 1998	Italy	Prospective Single Arm	-	61	-	Diverticulitis, Cancer, Others	4/9
Torralba <i>et al</i> ^[45] , 1998	Spain	Prospective Cohort	Subtotal Colectomy	31	35	Cancer	6/9
Biondo <i>et al</i> ^[27] , 1997	Spain	Prospective Single Arm	-	63	-	Diverticulitis, Cancer, Volvulus, Others	5/9
Lee <i>et al</i> ^[28] , 1997	United States of	Retrospective Single Arm	-	33	-	Diverticulitis	7/9

	America							
Mochizuki <i>et al</i> ^[46] , 1993	Japan	Prospective Cohort	Without IOCL	44	11	Cancer	5/9	
Allen-Mersh <i>et al</i> ^[47] , 1993	United Kingdom	Prospective Cohort	Hartmann's Procedure	15	35	-	5/9	
Tan <i>et al</i> ^[29] , 1991	Singapore	Prospective Single Arm	-	23	-	Cancer	4/9	
Gramegna <i>et al</i> ^[30] , 1989	Italy	Prospective Single Arm	-	27	-	Diverticulitis, Cancer	3/9	
Koruth <i>et al</i> ^[31] , 1985	United Kingdom	Prospective Cohort	Hartmann's Procedure	15	33	Diverticulitis, Cancer, Volvulus, Others	6/9	
Koruth <i>et al</i> ^[34] , 1985	United Kingdom	Prospective Single Arm	-	61	-	-	4/9	

IOCL: Intra-operative colonic lavage.

Supplementary Table 2 Jadad scores of included randomized controlled trials

Ref.	Was the study described as randomized?	Was the method of randomization appropriate?	Was the study described as blinding?	Was the method of blinding appropriate?	Was there a description of withdrawals and dropouts?	Was there a clear description of the inclusion/exclusion criteria?	Was there a method used to assess adverse effects described?	Were the statistical methods described?	Total score
Lim <i>et al</i> ^[50] , 2005	+ 1	+ 1	0	0	0	+ 1	+ 1	+ 1	5