

Supplementary Table 3. Articles addressing appendiceal perforation in 2012 and 2013

Author	Appendiceal perforation rate <sup>a</sup>	Reference standard for appendiceal perforation	Definition of Appendiceal Perforation	
			Surgical Findings	Pathologic Findings
Anderson et al. <sup>b)</sup> [1]	29.7% (180,849/608,116)	Not clarified	Not clarified	Not clarified
Andersson et al. <sup>b)</sup> [2]	20.6% (38,128/185,405)	Not clarified	Not clarified	Not clarified
Blanco et al. [3]	33.2% (106/319)	Not clarified	Not clarified	Not clarified
Chao et al. <sup>b)</sup> [4]	23.1% (156/675)	Not clarified	Not clarified	Not clarified
Deugarte et al. <sup>b)</sup> [5]	19.0% (555/2,919)	Not clarified	Not clarified	Not clarified
Ein et al. [6]	NA (496/NA)	Not clarified	Not clarified	Not clarified
Le et al. <sup>b)</sup> [7]	35.1% (282 <sup>c)</sup> /804)	Not clarified	Not clarified	Not clarified
Lee et al. <sup>b)</sup> [8]	29.7% (202,865 <sup>d)</sup> /683,016)	Not clarified	Not clarified	Not clarified
Livingston et al. <sup>b)</sup> [9]	28.7% (154,468/537,670)	Not clarified	Not clarified	Not clarified
Mason et al. <sup>b)</sup> [10]	20.6% (2,749 <sup>e)</sup> /13,330)	Not clarified	Not clarified	Not clarified
Massomi et al. <sup>b)</sup> [11]	27.4% (58,315/212,958)	Not clarified	Not clarified	Not clarified
Massomi et al. <sup>b)</sup> [12]	49.9% (32,680/65,464)	Not clarified	Not clarified	Not clarified
Naiditch et al. [13]	30.8% (231/750)	Not clarified	Not clarified	Not clarified
Papandria et al. <sup>b)</sup> [14]	30.3% (207,346 <sup>d)</sup> /683,590)	Not clarified	Not clarified	Not clarified
Ramos et al. <sup>b)</sup> [15]	43% (64/148)	Not clarified	Not clarified	Not clarified
Raval, et al. <sup>b)</sup> [16]	31.7% (2,976/9,377)	Not clarified	Not clarified	Not clarified
Redan et al. [17]	40.2% (379/943)	Not clarified	Not clarified	Not clarified
Scarborough et al. <sup>b)</sup> [18]	18.4% (10,027/54,467)	Not clarified	Not clarified	Not clarified
Scarborough et al. <sup>b)</sup> [19]	18.7% (7,335/39,122)	Not clarified	Not clarified	Not clarified
Senekjian et al. <sup>b)</sup> [20]	16.2% (9,998 <sup>d)</sup> /61,830)	Not clarified	Not clarified	Not clarified
Thomas et al. [21]	NA (242/NA)	Not clarified	Not clarified	Not clarified
Trent et al. <sup>b)</sup> [22]	42.4% (203/479)	Not clarified	Not clarified	Not clarified
Unknown <sup>b)</sup> [23]	16.3% (4,531/27,745)	Not clarified	Not clarified	Not clarified
Unknown <sup>b)</sup> [24]	30.0% (21,015/70,075)	Not clarified	Not clarified	Not clarified
Wei et al. <sup>b)</sup> [25]	25.8% (16,857/65,339)	Not clarified	Not clarified	Not clarified
Worni et al. <sup>b)</sup> [26]	24.9% (37,740 <sup>f)</sup> /151,774)	Not clarified	Not clarified	Not clarified
Yaghoubian et al. [27]	24.5% (4,053/16,512)	Not clarified	Not clarified	Not clarified
Fahmer et al. [28]	NA (114 <sup>g)</sup> /NA)	Not clarified		"Perforation" or peritonitis
Wu et al. [29]	46% (52 <sup>h)</sup> /113)	Not clarified		"Perforation", gangrene, or phlegmon
Wei et al. <sup>b)</sup> [30]	5.8% (53/908)	Not clarified		"Perforation", gangrene, abscess, or peritonitis
Blumfield et al. [31]	36% (58/161)	Surgical	Not clarified	
Graat et al. [32]	23.9% (325/1,358)	Surgical	Not clarified	
Kharbanda et al. [33]	27.0% (275/1,018)	Surgical	Not clarified	
Kong et al. [34]	60.2% (301/500)	Surgical	Not clarified	
Ladd et al. [35]	43.5% (290/667)	Surgical	Not clarified	
Leeuwenburgh et al. [36]	24.1% (60/249)	Surgical	Not clarified	
Levy et al. [37]	36.9% (115/312)	Surgical	Not clarified	
Mizrahi et al. [38]	13.2% (51/385)	Surgical	Not clarified	
Saito et al. [39]	25.5% (100/392)	Surgical	Not clarified	
Schietroma et al. [40]	NA (147/NA)	Surgical	Not clarified	
Chiang et al. [41]	NA (70/NA)	Surgical	"Perforation"	
Kong et al. [42]	62% (114/185)	Surgical	"Perforation"	
Lacher et al. [43]	21.0% (79/377)	Surgical	"Perforation"	
Khan et al. [44]	25.4% (100 <sup>i)</sup> /393)	Surgical	"Perforation" or gangrene	
Broker et al. [45]	21.1% (105/498)	Surgical	"Perforation", abscess, or pus	
Hughes et al. [46]	29.3% (78 <sup>j)</sup> /266)	Surgical	("Perforation" or gangrene) and (spillage or pus)	
Galli et al. <sup>b)</sup> [47]	16.4% (169/1,032)	Surgical	"Perforation" and (spillage or abscess)	
Groves et al. <sup>b)</sup> [48]	NA (289/NA)	Surgical	Spillage or abscess	
Hartwich et al. [49]	NA (237/NA)	Surgical	Wall defect or spillage <sup>d)</sup>	
Knott et al. [50]	NA (410/NA)	Surgical	Wall defect or spillage <sup>d)</sup>	
Safavi et al. [51]	23.6% (57/242)	Surgical	Wall defect or spillage <sup>d)</sup>	
St Peter et al. [52]	NA (220/NA)	Surgical	Wall defect or spillage <sup>d)</sup>	
Fallon et al. [53]	NA (50 <sup>g)</sup> /NA)	Surgical	Wall defect, abscess, pus, or necrosis	
Ali et al. [54]	23.5% (295/1,257)	Pathologic		Not clarified
Dennett et al. [55]	NA (108/NA)	Pathologic		Not clarified
Hung et al. [56]	38.6% (88/228)	Pathologic		Not clarified
Yannam et al. [57]	29.4% (147/500)	Pathologic		Not clarified
Yilmaz et al. [58]	21.8% (243/1,117)	Pathologic		Not clarified
Teixeira et al. [59]	22.9% (942/4,108)	Pathologic		"Perforation"
Wilson et al. [60]	9.7% (50 <sup>g)</sup> /516)	Pathologic		"Perforation" or necrosis
Dimitriou et al. [61]	37.1% (150 <sup>g)</sup> /404)	Pathologic		"Perforation", abscess, or peritonitis
Wei et al. [62]	8.5% (155 <sup>g)</sup> /1,834)	Pathologic		Gangrene
McGowan et al. [63]	12.1% (154/1,271)	Pathologic		Wall defect
Naiditch et al. [64]	32.1% (254/791)	Surgical or pathologic	Not clarified	Not clarified
Pooler et al. [65]	17.8% (120/675)	Surgical or pathologic	Not clarified	Not clarified
Dhupar et al. [66]	13.7% (59 <sup>g)</sup> /431)	Surgical or pathologic	Not clarified	"Perforation", gangrene, or abscess
Bansal et al. [67]	60.5% (170/281)	Surgical or pathologic	"Perforation"	"Perforation"
Tsai et al. <sup>b)</sup> [68]	58% (102/177)	Surgical or pathologic	"Perforation"	"Perforation" and gangrene
Hansson et al. [69]	22.8% (52/228)	Surgical or pathologic	"Perforation"	"Perforation" and necrosis
Azok et al. [70]	17.4% (65 <sup>g)</sup> /374 <sup>h)</sup> )	Surgical or pathologic	"Perforation"	"Perforation" or necrosis
Nomura et al. [71]	NA (50/NA)	Surgical and pathologic	Not clarified	Not clarified
Akkoyun et al. [72]	NA (234/NA)	Surgical and pathologic	"Perforation"	"Perforation" but not microperforation
Vahdad et al. [73]	NA (221/NA)	Surgical and pathologic	"Perforation" or spillage <sup>d)</sup>	"Perforation"
Nataraja et al. [74]	NA (375 <sup>g)</sup> /NA)	Surgical and pathologic	Pus or phlegmon	"Perforation" or necrosis

NA, not available.

"Perforation" denotes "perforation" without further definition in the original text.

<sup>a)</sup>Data in parentheses are the number of patients with appendiceal perforation divided by the number of patients with confirmed appendicitis. <sup>b)</sup>Patient inclusion was based on the International Classification Disease code-9 or -10. <sup>c)</sup>Complicated appendicitis" was used instead of "perforated appendicitis" in the original text. <sup>d)</sup>Citing (reference number 75). <sup>e)</sup>Advanced appendicitis" was used instead of "perforated appendicitis" in the original text. <sup>f)</sup>Gangrenous appendicitis" was used instead of "perforated appendicitis" in the original text. <sup>g)</sup>Not including cases with computed tomography findings of perforation.