Appendix C - Evidence to Decision (EtDs) Tables

QUESTION

Should nonoperative management vs. appendectomy be used for adult patients with acute, uncomplicated appendicitis?	
POPULATION:	adult patients with acute, uncomplicated appendicitis
INTERVENTION:	nonoperative management
COMPARISON:	appendectomy
MAIN OUTCOMES:	Return to work; Length of stay; Length of stay (low risk of bias studies); Cost; Quality of life; Readmission; Death; Death; Postoperative abscess; New course of antibiotics; IR drain; Conversion to operative management or reoperation (all); Conversion to operative management or reoperation (short term); Conversion to operative management or reoperation (long term);
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ● **Small** ○ Moderate ○ Large ○ Varies ○ Don't know		Small 100%

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with appendectomy	Risk difference with nonoperative management
Return to work	1411 (4 RCTs)	⨁⨁⨁⨁ High	-	The mean return to work was **0**	MD **1.78 lower** (3.48 lower to 0.08 lower)
Cost	180 (1 RCT)	⨁⨁⨁⨁ High	-	The mean cost was **0**	SMD **1.01 lower** (1.32 lower to 0.7 lower)
Quality of life	1347 (1 RCT)	⨁⨁⨁◯ Moderate[a]	-	The mean quality of life was **0**	SMD **0.08 higher** (0.03 lower to 0.18 higher)
				Study population	

New course of antibiotics	30 (1 RCT)	⨁⨁◯◯ Low[a,b]	**OR 0.87** (0.05 to 15.28)	71 per 1,000	**9 fewer per 1,000** (68 fewer to 469 more)	

a. The confidence interval for this outcome crosses the threshold for significance.
b. Suboptimal power.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT

- **Large**
- Moderate
- Small
- Trivial
- Varies
- Don't know

RESEARCH EVIDENCE

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with appendectomy	**Risk difference with nonoperative management**
Length of stay (low risk of bias studies)	1691 (4 RCTs)	⨁⨁⨁◯ Moderate[a]	-	The mean length of stay (low risk of bias studies) was **0**	MD **0.3 higher** (0.5 lower to 1.11 higher)
Readmission	1428 (2 RCTs)	⨁⨁⨁⨁ High	**OR 6.10** (4.21 to 8.84)	Study population	
				53 per 1,000	**201 more per 1,000** (137 more to 277 more)
Postoperative abscess	399 (3 RCTs)	⨁◯◯◯ Very low[a,d,e]	**OR 1.91** (0.38 to 9.50)	Study population	
				10 per 1,000	**9 more per 1,000** (6 fewer to 78 more)
IR drain	1332 (1 RCT)	⨁⨁⨁◯ Moderate[d]	**OR 4.02** (1.66 to 9.71)	Study population	
				5 per 1,000	**14 more per 1,000** (3 more to 38 more)
Conversion to operative management or reoperation (all)	381 (4 RCTs)	⨁⨁⨁⨁ High[e]	**OR 20.09** (5.39 to 74.90)	Study population	
				5 per 1,000	**91 more per 1,000** (22 more to 279 more)
Conversion to operative management or reoperation (short term)	41 (1 RCT)	⨁⨁◯◯ Low[a,d]	**OR 13.06** (0.66 to 260.45)	Study population	
				0 per 1,000	**0 fewer per 1,000** (0 fewer to 0 fewer)
				Study population	

ADDITIONAL CONSIDERATIONS

large 100%

	Conversion to operative management or reoperation (long term)	310 (2 RCTs)	⨁⨁⨁⨁ High[e]	**OR 30.37** (5.77 to 159.77)	6 per 1,000	**159 more per 1,000** (30 more to 504 more)	

a. The confidence interval for this outcome crosses the threshold for significance.
b. The studies contributing to this outcome were very inconsistent, with non overlapping confidence intervals and opposing estimates of harm or benefit.
c. The studies contributing to this outcome were at high risk of bias on the Newcastle-Ottawa scale due to concerns over the comparability of the two groups.
d. Suboptimal power.
e. This outcome included a study at high risk of bias on the Cochrane Risk of Bias tool due to concerns over their reporting of outcomes.

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Very low ● **Low** ○ Moderate ○ High ○ No included studies		Low 100%

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ● **Possibly important uncertainty or variability** ○ Probably no important uncertainty or variability ○ No important uncertainty or variability		Possibly important uncertainty or variability 100%

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS

● **Favors the comparison** ○ Probably favors the comparison ○ Does not favor either the intervention or the comparison ○ Probably favors the intervention ○ Favors the intervention ○ Varies ○ Don't know		Favors the comparison 100%

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		Probably yes 100%

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		Probably yes 100%

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

Appendix C - Evidence to Decision (EtDs) Tables

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	**Conditional recommendation against the intervention**	Conditional recommendation for either the intervention or the comparison	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	•	○	○	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

Immunocompromised patients, pregnant patients, patients with poor access to care (insurance, rural vs urban, distance), presence of fecalith on imaging, IBD patients, recurrent appendicitis, geriatric patients, patients at higher risk for operative management, morbidly obese

Implementation considerations

Monitoring and evaluation

Research priorities

longer term studies – long term outcome data
prioritizing quality of life studies

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should nonoperative management vs. appendectomy be used for pediatric patients with acute, uncomplicated appendicitis?	
POPULATION:	pediatric patients with acute, uncomplicated appendicitis
INTERVENTION:	nonoperative management
COMPARISON:	appendectomy
MAIN OUTCOMES:	Return to school; Length of stay; Cost; Quality of life; Readmission; Death; ICU admission; New/postoperative abscess; New course of antibiotics; IR drain; Conversion to operative management/reoperation (all); Conversion to operative management/reoperation (short term); Conversion to operative management/reoperation (long term);
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ● **Small** ○ Moderate ○ Large ○ Varies ○ Don't know		Small 100%

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with appendectomy	Risk difference with nonoperative management
Return to school	39 (1 RCT)	⨁◯◯◯ Very low[a,b,c]	-	The mean return to school was **0**	MD **2 lower** (6.19 lower to 2.19 higher)
Cost	50 (1 RCT)	⨁⨁◯◯ Low[a,b]	-	The mean cost was **0**	SMD **0.02 lower** (0.58 lower to 0.53 higher)
ICU admission				Study population	

	44 (1 observational study)	⨁◯◯◯ Very low[a,b,d]	**OR 0.24** (0.01 to 6.28)	53 per 1,000	**39 fewer per 1,000** (52 fewer to 206 more)
New/postoperative abscess	284 (4 observational studies)	⨁◯◯◯ Very low[a,b,d]	**OR 0.13** (0.01 to 1.29)	Study population	
				21 per 1,000	**18 fewer per 1,000** (21 fewer to 6 more)
IR drain	216 (2 observational studies)	⨁◯◯◯ Very low[a,b,d]	**OR 0.14** (0.00 to 6.82)	Study population	
				9 per 1,000	**8 fewer per 1,000** (9 fewer to 49 more)

a. Suboptimal sample size.
b. This outcome's confidence interval is non-significant.
c. This outcome included a study deemed at high risk of bias using the Cochrane Risk of Bias tool due to inadequate descriptions of study protocol.
d. Nearly all the observational studies included were rated high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the two groups.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
• **Large** ○ Moderate ○ Small ○ Trivial ○ Varies ○ Don't know		Large 100%

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with appendectomy	**Risk difference with nonoperative management**
Length of stay	77146 (6 observational studies)	⨁◯◯◯ Very low[a,b,c]	-	The mean length of stay was **0**	MD **1.4 higher** (0.61 lower to 3.41 higher)
Quality of life	194 (2 observational studies)	⨁◯◯◯ Very low[a,b,d]	-	The mean quality of life was **0**	SMD **0.09 lower** (0.71 lower to 0.53 higher)
Readmission	193 (4 RCTs)	⨁⨁⨁⨁ High[e]	**OR 10.57** (2.30 to 48.69)	Study population	
				31 per 1,000	**220 more per 1,000** (37 more to 575 more)
Conversion to operative management/reoperation (all)	100 (2 RCTs)	⨁⨁⨁⨁ High	**OR 38.31** (4.90 to 299.69)	Study population	
				0 per 1,000	**0 fewer per 1,000**

					(0 fewer to 0 fewer)
Conversion to operative management/reoperation (short term)	100 (2 RCTs)	⨁⨁⨁⨁ High[a,d]	**OR 5.89** (0.66 to 52.28)	Study population	
				0 per 1,000	**0 fewer per 1,000** (0 fewer to 0 fewer)
Conversion to operative management/reoperation (long term)	100 (2 RCTs)	⨁⨁⨁⨁ High[d]	**OR 22.71** (2.87 to 179.78)	Study population	
				0 per 1,000	**0 fewer per 1,000** (0 fewer to 0 fewer)

a. This outcome's confidence interval is non-significant.
b. Nearly all the observational studies included were rated high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the two groups.
c. This outcome included studies with non-overlapping confidence intervals.
d. Suboptimal sample size.
e. This outcome included a study deemed at high risk of bias using the Cochrane Risk of Bias tool due to inadequate descriptions of study protocol.

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● Very low ○ Low ○ Moderate ○ High ○ No included studies		

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ● **Possibly important uncertainty or variability** ○ Probably no important uncertainty or variability ○ No important uncertainty or variability		Possibly important uncertainty or variability 100%

Balance of effects

Appendix C - Evidence to Decision (EtDs) Tables

Does the balance between desirable and undesirable effects favor the intervention or the comparison?		
JUDGEMENT	**RESEARCH EVIDENCE**	**ADDITIONAL CONSIDERATIONS**
• **Favors the comparison** o Probably favors the comparison o Does not favor either the intervention or the comparison o Probably favors the intervention o Favors the intervention o Varies o Don't know		Favors the comparison 100%

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	**RESEARCH EVIDENCE**	**ADDITIONAL CONSIDERATIONS**
o No o Probably no • **Probably yes** o Yes o Varies o Don't know		Probably yes 100%

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	**RESEARCH EVIDENCE**	**ADDITIONAL CONSIDERATIONS**
o No o Probably no • **Probably yes** o Yes o Varies o Don't know		Probably yes 100%

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			

Appendix C - Evidence to Decision (EtDs) Tables

	JUDGEMENT						
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	**Conditional recommendation against the intervention**	Conditional recommendation for either the intervention or the comparison	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	•	○	○	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

Immunocompromised patients, pregnant patients, patients with poor access to care (insurance, rural vs urban, distance), presence of fecalith on imaging, IBD patients, recurrent appendicitis, geriatric patients, patients at higher risk for operative management, morbidly obese. Infants, young children

Implementation considerations

Monitoring and evaluation

Appendix C - Evidence to Decision (EtDs) Tables

Research priorities

longer term studies – long term outcome data
prioritizing quality of life studies

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should nonoperative vs. operative management be used for adult patients with acute, complicated appendicitis?	
POPULATION:	adult patients with acute, complicated appendicitis
INTERVENTION:	nonoperative
COMPARISON:	operative management
MAIN OUTCOMES:	Length of stay; Cost; Readmission; Death; ICU admission; New/postoperative abscess; Reoperation; Reintervention - IR drain;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● **Trivial** ○ Small ○ Moderate ○ Large ○ Varies ○ Don't know		trivial 100%

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with operative management	Risk difference with nonoperative
ICU admission	183 (1 observational study)	⨁◯◯◯ Very low[a]	**OR 0.16** (0.03 to 0.80)	Study population	
				100 per 1,000	**83 fewer per 1,000** (97 fewer to 18 fewer)

a. Suboptimal sample size.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS

Appendix C - Evidence to Decision (EtDs) Tables

- **Large**
- Moderate
- Small
- Trivial
- Varies
- Don't know

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with operative management	Risk difference with nonoperative
Length of stay	60 (1 RCT)	⨁⨁⨁◯ Moderate[a]	-	The mean length of stay was **0**	MD **1.12 higher** (0.65 higher to 1.59 higher)
Cost	305 (1 observational study)	⨁◯◯◯ Very low[a,b,c]	-	The mean cost was **0**	MD **124 higher** (9724.44 lower to 9972.44 higher)
Readmission	60 (1 RCT)	⨁⨁⨁◯ Moderate[a]	**OR 10.55** (1.23 to 90.66)	Study population	
				33 per 1,000	**233 more per 1,000** (7 more to 724 more)
Death	60 (1 RCT)	⨁⨁⨁◯ Moderate[a]	**OR 7.39** (0.15 to 372.38)	Study population	
				0 per 1,000	**0 fewer per 1,000** (0 fewer to 0 fewer)
New/postoperative abscess	60 (1 RCT)	⨁⨁◯◯ Low[a,b]	**OR 3.27** (0.77 to 13.83)	Study population	
				100 per 1,000	**167 more per 1,000** (21 fewer to 506 more)
Reoperation	60 (1 RCT)	⨁⨁⨁◯ Moderate[a]	**OR 29.00** (3.49 to 241.13)	Study population	
				33 per 1,000	**467 more per 1,000** (74 more to 859 more)

a. Suboptimal sample size.
b. Non-significant confidence interval.
c. This outcome was based on a study rated at high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the two groups.

large 100%

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS

• **Very low** o Low o Moderate o High o No included studies		very low 100%

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Important uncertainty or variability • **Possibly important uncertainty or variability** o Probably no important uncertainty or variability o No important uncertainty or variability		Possibly important uncertainty or variability 100%

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
• **Favors the comparison** o Probably favors the comparison o Does not favor either the intervention or the comparison o Probably favors the intervention o Favors the intervention o Varies o Don't know		Favors the comparison 100%

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o No o Probably no • **Probably yes** o Yes o Varies o Don't know		Probably yes 100%

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o No o Probably no • **Probably yes** o Yes o Varies		Probably yes 100%

○ Don't know		

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	**Conditional recommendation against the intervention**	Conditional recommendation for either the intervention or the comparison	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	•	○	○	○

CONCLUSIONS

Recommendation

Justification

malignancy rate

Subgroup considerations

Appendix C - Evidence to Decision (EtDs) Tables

Immunocompromised patients, pregnant patients, patients with poor access to care (insurance, rural vs urban, distance), presence of fecalith on imaging, IBD patients, recurrent appendicitis, geriatric patients, patients at higher risk for operative management, morbidly obese

Discrete abscess*, longer duration of sx (>1wk) *
Cecal inflammation on admission imaging, septic patients

Implementation considerations

Monitoring and evaluation

Research priorities

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should nonoperative management vs. operative management be used for pediatric patients with acute, complicated appendicitis?	
POPULATION:	pediatric patients with acute, complicated appendicitis
INTERVENTION:	nonoperative management
COMPARISON:	operative management
MAIN OUTCOMES:	Return to school; Length of stay; Cost; Quality of life; Readmission; Abscess; New course of antibiotics; Conversion to operative management/reoperation;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ○ Small ○ Moderate ○ Large ○ Varies ○ Don't know		

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● **Large** ○ Moderate ○ Small ○ Trivial ○ Varies ○ Don't know		large 100%

Appendix C - Evidence to Decision (EtDs) Tables

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with operative management	Risk difference with nonoperative management
Return to school	131 (1 RCT)	⨁⨁⨁◯ Moderate[a]	-	The mean return to school was **0**	MD **5.6 higher** (2.82 higher to 8.38 higher)
Length of stay	171 (2 RCTs)	⨁⨁◯◯ Low[a,b]	-	The mean length of stay was **0**	MD **1.2 higher** (1.16 lower to 3.56 higher)
Cost	131 (1 RCT)	⨁⨁◯◯ Low[a,b]	-	The mean cost was **0**	MD **4929 higher** (567.98 lower to 10425.98 higher)
Quality of life	40 (1 RCT)	⨁⨁◯◯ Low[a,c]	-	The mean quality of life was **0**	SMD **2.88 lower** (3.79 lower to 1.97 lower)
Readmission	131 (1 RCT)	⨁⨁⨁◯ Moderate[a]	**OR 5.39** (1.89 to 15.37)	Study population	
				78 per 1,000	**235 more per 1,000** (60 more to 488 more)
Abscess	171 (2 RCTs)	⨁⨁⨁⨁ High[a]	**OR 2.23** (1.10 to 4.50)	Study population	
				190 per 1,000	**154 more per 1,000** (15 more to 324 more)
New course of antibiotics	316 (1 observational study)	⨁◯◯◯ Very low[a,d]	**OR 2.42** (1.01 to 5.84)	Study population	
				48 per 1,000	**60 more per 1,000** (0 fewer to 178 more)
Conversion to operative management/reoperation	40 (1 RCT)	⨁⨁◯◯ Low[a,b]	**OR 11.18** (0.56 to 222.98)	Study population	
				0 per 1,000	**0 fewer per 1,000** (0 fewer to 0 fewer)

a. Suboptimal sample size.
b. This outcome's confidence interval is non-significant.
c. This outcome included an RCT where the two groups had statistically significant differences at baseline, raising concerns about the randomization process.

	d. This outcome included studies rated high or unclear risk of bias on the Newcastle Ottawa scale due to concerns about the comparability of the two groups.	

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Very low ● **Low** ○ Moderate ○ High ○ No included studies		Low 100%

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ● Possibly important uncertainty or variability ○ Probably no important uncertainty or variability ○ No important uncertainty or variability		Possibly important uncertainty or variability 100%

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● **Favors the comparison** ○ Probably favors the comparison ○ Does not favor either the intervention or the comparison ○ Probably favors the intervention ○ Favors the intervention ○ Varies ○ Don't know		favors the comparison 100%

Appendix C - Evidence to Decision (EtDs) Tables

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		Probably yes 100%

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		Probably yes 100%

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	**Conditional recommendation against the intervention**	Conditional recommendation for either the intervention or the comparison	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	•	○	○	○

CONCLUSIONS

Appendix C - Evidence to Decision (EtDs) Tables

Recommendation

Justification

Subgroup considerations

Immunocompromised patients, pregnant patients, patients with poor access to care (insurance, rural vs urban, distance), presence of fecalith on imaging, IBD patients, recurrent appendicitis, geriatric patients, patients at higher risk for operative management, morbidly obese

Discrete abscess*, longer duration of sx (>1wk)
Cecal inflammation on admission imaging, septic patients

Implementation considerations

Monitoring and evaluation

Research priorities

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should operation >12 hours after diagnosis vs. operation <12 hours after diagnosis be used for patients with uncomplicated appendicitis undergoing appendectomy?	
POPULATION:	patients with uncomplicated appendicitis undergoing appendectomy
INTERVENTION:	operation >12 hours after diagnosis
COMPARISON:	operation <12 hours after diagnosis
MAIN OUTCOMES:	Length of hospital stay; Abscess; Readmission; Reoperation; Drain placement;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● **Trivial** ○ Small ○ Moderate ○ Large ○ Varies ○ Don't know		

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with operation <12 hours after diagnosis	Risk difference with operation >12 hours after diagnosis
Reoperation	2559 (1 observational study)	⨁◯◯◯ Very low[a,b]	**OR 0.93** (0.61 to 1.42)	Study population	
				36 per 1,000	**2 fewer per 1,000** (14 fewer to 14 more)
Drain placement	863 (1 observational study)	⨁◯◯◯ Very low[a,b,c]	**OR 0.73** (0.31 to 1.74)	Study population	
				35 per 1,000	**9 fewer per 1,000**

						(24 fewer to 25 more)

a. The confidence interval for this outcome is non-significant.
b. The fragility index of this outcome is 0.
c. This outcome contained studies that were rated high risk of bias on the Newcastle Ottawa scale due to comparability of the intervention and comparison arms.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
• **Trivial** ○ Small ○ Moderate ○ Large ○ Varies ○ Don't know		

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with operation <12 hours after diagnosis	Risk difference with operation >12 hours after diagnosis
Length of hospital stay	7181 (4 observational studies)	⨁◯◯◯ Very low[a]	-	The mean length of hospital stay was **0**	MD **0.59 higher** (0.17 higher to 1 higher)
Abscess	10432 (8 observational studies)	⨁◯◯◯ Very low[a]	**OR 1.41** (0.90 to 2.21)	Study population	
				16 per 1,000	**7 more per 1,000** (2 fewer to 19 more)
Readmission	5968 (4 observational studies)	⨁◯◯◯ Very low[a,b]	**OR 1.08** (0.69 to 1.70)	Study population	
				14 per 1,000	**1 more per 1,000** (4 fewer to 9 more)

a. This outcome contained studies that were rated high risk of bias on the Newcastle Ottawa scale due to comparability of the intervention and comparison arms.
b. The confidence interval for this outcome is non-significant.

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS

• **Very low** ○ Low ○ Moderate ○ High ○ No included studies		

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ○ Possibly important uncertainty or variability • **Probably no important uncertainty or variability** ○ No important uncertainty or variability		

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Favors the comparison ○ Probably favors the comparison • **Does not favor either the intervention or the comparison** ○ Probably favors the intervention ○ Favors the intervention ○ Varies ○ Don't know		

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no • **Probably yes** ○ Yes ○ Varies ○ Don't know		

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes • **Yes** ○ Varies		

○ Don't know		

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	Conditional recommendation against the intervention	**Conditional recommendation for either the intervention or the comparison**	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	○	•	○	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

Appendix C - Evidence to Decision (EtDs) Tables

Immunocompromised patients

Implementation considerations

OR through put may justify doing the case overnight if there is no availability during the following day.
Upper limit of waiting -

Monitoring and evaluation

Upper limit of waiting -

Research priorities

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should operation >12 hours from diagnosis vs. operation <12 hours from diagnosis be used for pediatric patients with uncomplicated appendicitis undergoing appendectomy?	
POPULATION:	pediatric patients with uncomplicated appendicitis undergoing appendectomy
INTERVENTION:	operation >12 hours from diagnosis
COMPARISON:	operation <12 hours from diagnosis
MAIN OUTCOMES:	Abscess; Readmission; Reoperation;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● **Trivial** ○ Small ○ Moderate ○ Large ○ Varies ○ Don't know		

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with operation <12 hours from diagnosis	Risk difference with operation >12 hours from diagnosis
Readmission	2756 (1 observational study)	⨁◯◯◯ Very low[d]	**OR 0.66** (0.45 to 0.96)	Study population	
				51 per 1,000	**17 fewer per 1,000** (27 fewer to 2 fewer)

a. This outcome contained studies that were rated unclear risk of bias on the Newcastle Ottawa scale due to comparability of the intervention and comparison arms.

b. The studies contributing to this outcome had non-overlapping confidence intervals.
c. This outcome had a fragility index of 0.
d. This outcome contained studies that were rated high risk of bias on the Newcastle Ottawa scale due to comparability of the intervention and comparison arms.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ● **Small** ○ Moderate ○ Large ○ Varies ○ Don't know		

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with operation <12 hours from diagnosis	Risk difference with operation >12 hours from diagnosis
Reoperation	2756 (1 observational study)	⨁◯◯◯ Very low[a,b,c]	**OR 1.04** (0.45 to 2.41)	Study population	
				8 per 1,000	**0 fewer per 1,000** (4 fewer to 11 more)
Abscess	3004 (2 observational studies)	⨁◯◯◯ Very low[a,b,c]	**OR 2.60** (0.05 to 127.83)	Study population	
				57 per 1,000	**79 more per 1,000** (54 fewer to 829 more)

a. This outcome contained studies that were rated unclear risk of bias on the Newcastle Ottawa scale due to comparability of the intervention and comparison arms.
b. This outcome had a fragility index of 0.
c. This outcome had a non-significant confidence interval.

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● **Very low** ○ Low ○ Moderate ○ High ○ No included studies		

Appendix C - Evidence to Decision (EtDs) Tables

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ○ Possibly important uncertainty or variability ● **Probably no important uncertainty or variability** ○ No important uncertainty or variability		

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Favors the comparison ○ Probably favors the comparison ● **Does not favor either the intervention or the comparison** ○ Probably favors the intervention ○ Favors the intervention ○ Varies ○ Don't know		

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know

Appendix C - Evidence to Decision (EtDs) Tables

	JUDGEMENT						
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	Conditional recommendation against the intervention	**Conditional recommendation for either the intervention or the comparison**	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	○	•	○	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

Immunocompromised patients

Implementation considerations

OR through put may justify doing the case overnight if there is no availability during the following day.

Upper limit of waiting

Appendix C - Evidence to Decision (EtDs) Tables

Monitoring and evaluation

Upper limit of waiting

Research priorities

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should Suction and lavage vs. suction alone be used for adult patients undergoing appendectomy for complicated appendicitis?	
POPULATION:	adult patients undergoing appendectomy for perforated appendicitis
INTERVENTION:	Suction and lavage
COMPARISON:	suction alone
MAIN OUTCOMES:	Organ space infection*; Postoperative drain placement; Hospital length of stay (LOS); Readmission; Reoperation*; Death*;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		100% Yes

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ● **Small** ○ Moderate ○ Large ○ Varies ○ Don't know		83% Small 17% Large

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with suction alone	Risk difference with Suction and lavage
Hospital length of stay (LOS)	546 (2 RCTs)	⨁◯◯◯ Very low[a,b,c]	-	The mean hospital lengh of stay (LOS) was **0**	MD **1.28 lower** (3.32 lower to .76 higher)
Organ space infection*	713 (4 RCTs)	⨁◯◯◯ Very low[a,b,c]	**RR 0.92** (0.41 to 2.06)	Study population	
				93 per 1,000	**7 fewer per 1,000** (55 fewer to 98 more)
Death*				Study population	

Appendix C - Evidence to Decision (EtDs) Tables

	286 (1 RCT)	⨁◯◯◯ Very low[a,c,d]	**RR 0.31** (0.02 to 6.39)	11 per 1,000	**8 fewer per 1,000** (11 fewer to 62 more)
Readmission	367 (2 RCTs)	⨁◯◯◯ Very low[a,b,c]	**RR 0.90** (0.36 to 2.24)	Study population	
				121 per 1,000	**12 fewer per 1,000** (77 fewer to 150 more)

a. This outcome included a study rated at high risk of bias on the Cochrane Risk of Bias Tool due to inadequate description of the randomization process and ambiguity surrounding the number of patients lost to follow up.
b. The papers contributing to this outcome had non-overlapping confidence intervals.
c. This outcome's confidence interval is non-significant.
d. This outcome's fragility index is 0.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Large ○ Moderate ● **Small** ○ Trivial ○ Varies ○ Don't know		100% Small

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with suction alone	Risk difference with Suction and lavage
Postoperative drain placement	453 (3 RCTs)	⨁◯◯◯ Very low[a,b,c]	**RR 1.11** (0.53 to 2.30)	Study population	
				50 per 1,000	**6 more per 1,000** (24 fewer to 65 more)
Reoperation*	453 (3 RCTs)	⨁◯◯◯ Very low[a,b,c]	**RR 1.68** (0.59 to 4.79)	Study population	
				31 per 1,000	**21 more per 1,000** (13 fewer to 117 more)

a. This outcome included a study rated at high risk of bias on the Cochrane Risk of Bias Tool due to inadequate description of the randomization process and ambiguity surrounding the number of patients lost to follow up.
b. This outcome's confidence interval is non-significant.
c. This outcome's fragility index is 0.

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS

• **Very low** o Low o Moderate o High o No included studies		100% Very low

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Important uncertainty or variability o Possibly important uncertainty or variability • **Probably no important uncertainty or variability** o No important uncertainty or variability		87.5% Probably no important uncertainty or variability 12.5% Possibly important uncertainty or variability

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Favors the comparison o Probably favors the comparison • **Does not favor either the intervention or the comparison** o Probably favors the intervention o Favors the intervention o Varies o Don't know		100% Does not favor either the intervention or the comparison

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o No o Probably no • **Probably yes** o Yes o Varies o Don't know		87.5% Probably yes 12.5% Yes

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o No o Probably no o Probably yes • **Yes**		87.5% Yes 12.5% Probably yes

○ Varies ○ Don't know		

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	Conditional recommendation against the intervention	**Conditional recommendation for either the intervention or the comparison**	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	○	•	○	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

Pus in all 4 quadrants, immunocompromised patients

Implementation considerations

Volume of irrigation fluid used, antibiotic irrigation/type of irrigation

Monitoring and evaluation

Research priorities

standardized irrigation technique in future randomized studies

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should Suction and lavage vs. suction alone be used for pediatric patients undergoing appendectomy for complicated appendicitis?	
POPULATION:	pediatric patients undergoing appendectomy for perforated appendicitis
INTERVENTION:	Suction and lavage
COMPARISON:	suction alone
MAIN OUTCOMES:	Organ space infection*; Death*; Post operative drain placement; Hospital length of stay (LOS); Readmission; Reoperation*;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		100% Yes

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ● **Small** ○ Moderate ○ Large ○ Varies ○ Don't know		85.7% Small 14.3% moderate

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with suction alone	Risk difference with Suction and lavage
Organ space infection*	406 (3 RCTs)	⨁⨁◯◯ Low[a,b]	**RR 0.92** (0.57 to 1.49)	Study population	
				144 per 1,000	**11 fewer per 1,000** (62 fewer to 70 more)
				Study population	

Post operative drain placement	320 (2 RCTs)	⨁⨁◯◯ Low[a,b]	**RR 0.75** (0.37 to 1.53)	100 per 1,000	**25 fewer per 1,000** (63 fewer to 53 more)
Hospital length of stay (LOS)	320 (2 RCTs)	⨁⨁◯◯ Low[a,c]	-	The mean hospital length of stay (LOS) was **0**	MD **0.33 lower** (0.97 lower to 0.32 higher)
Readmission	320 (2 RCTs)	⨁⨁⨁◯ Moderate[a,b]	**RR 0.24** (0.04 to 1.45)	Study population	
				38 per 1,000	**28 fewer per 1,000** (36 fewer to 17 more)

a. This outcome has a non-significant confidence interval.
b. This outcome has a fragility index of 0.
c. N< 400 with continuous variable.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT

- ○ Large
- ○ Moderate
- ● **Small**
- ○ Trivial
- ○ Varies
- ○ Don't know

RESEARCH EVIDENCE

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with suction alone	Risk difference with Suction and lavage
Reoperation*	1105 (4 RCTs)	⨁⨁⨁◯ Moderate[a,b]	**RR 2.57** (0.47 to 13.97)	Study population	
				5 per 1,000	**8 more per 1,000** (3 fewer to 63 more)

a. This outcome has a non-significant confidence interval.
b. This outcome has a fragility index of 1.

ADDITIONAL CONSIDERATIONS

100% Small

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT | **RESEARCH EVIDENCE** | **ADDITIONAL CONSIDERATIONS**

○ Very low ● **Low** ○ Moderate ○ High ○ No included studies		100% Low

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ○ Possibly important uncertainty or variability ● **Probably no important uncertainty or variability** ○ No important uncertainty or variability		87.5% Probably no important uncertainty or variability 12.5% Possibly important uncertainty or variability

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Favors the comparison ○ Probably favors the comparison ● **Does not favor either the intervention or the comparison** ○ Probably favors the intervention ○ Favors the intervention ○ Varies ○ Don't know		100% Does not favor either the intervention or the comparison

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		87.5% Probably yes 12.5% Yes

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies		87.5% Yes 12.5% Probably yes

○ Don't know		

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	Conditional recommendation against the intervention	**Conditional recommendation for either the intervention or the comparison**	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	○	•	○	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

Pus in all 4 quadrants, immunocompromised patients

Implementation considerations

Volume of irrigation fluid used, antibiotic irrigation/type of irrigation

Monitoring and evaluation

Research priorities

standardized irrigation technique in future randomized studies

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should routine drain placement vs. no routine drain placement be used for adult patients undergoing appendectomy for complicated appendicitis?	
POPULATION:	adult patients undergoing appendectomy for complicated appendicitis
INTERVENTION:	routine drain placement
COMPARISON:	no routine drain placement
MAIN OUTCOMES:	Organ space infection*; Required new course of antibiotics*; Postoperative drain placement/replacement*; Readmission; Reoperation*; Death*; Length of stay;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

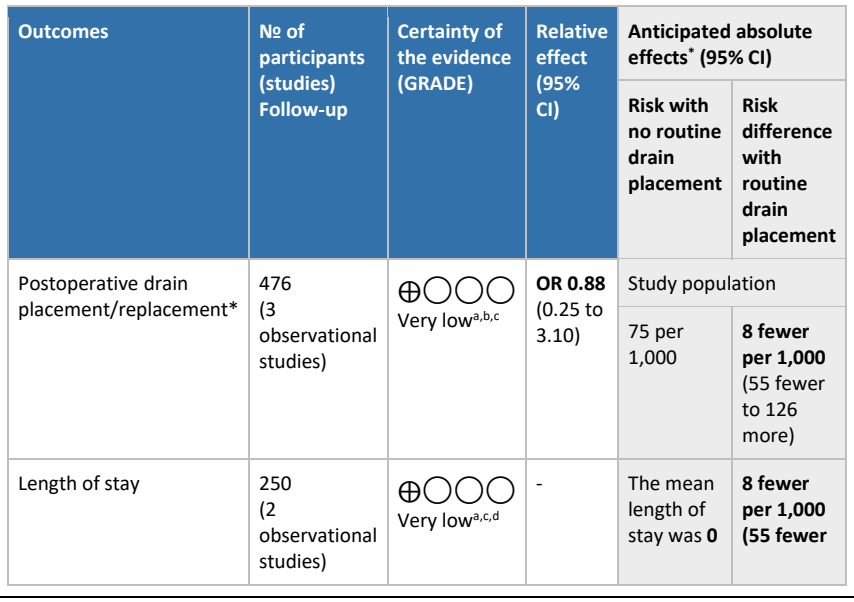
Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		100% Yes

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● **Trivial** ○ Small ○ Moderate ○ Large ○ Varies ○ Don't know		83.3% Trivial

						to 126 more)

a. This outcome has a non-significant confidence interval.
b. This outcome has a fragility index of 0.
c. This outcome included studies rated at high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the two groups.
d. This outcome is a continuous variable with n< 400.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT

○ Large
● **Moderate**
○ Small
○ Trivial
○ Varies
○ Don't know

RESEARCH EVIDENCE

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with no routine drain placement	Risk difference with routine drain placement
Organ space infection*	1727 (6 observational studies)	⨁◯◯◯ Very low[a,b,c]	**OR 1.12** (0.77 to 1.63)	Study population	
				94 per 1,000	**10 more per 1,000** (20 fewer to 50 more)
Required new course of antibiotics*	327 (2 observational studies)	⨁◯◯◯ Very low[a,b,c]	**OR 1.59** (0.66 to 3.82)	Study population	
				71 per 1,000	**37 more per 1,000** (23 fewer to 154 more)
Readmission	991 (2 observational studies)	⨁◯◯◯ Very low[a,b,c]	**RR 1.28** (0.75 to 2.17)	Study population	
				58 per 1,000	**16 more per 1,000** (15 fewer to 68 more)
Reoperation*	225 (1 observational study)	⨁◯◯◯ Very low[b,c]	**OR 1.78** (0.50 to 6.32)	Study population	
				41 per 1,000	**30 more per 1,000** (20 fewer to 173 more)

a. This outcome included studies rated at high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the two groups.
b. This outcome has a non-significant confidence interval.
c. This outcome has a fragility index of 0.

ADDITIONAL CONSIDERATIONS

100% Moderate

Certainty of evidence

What is the overall certainty of the evidence of effects?

Appendix C - Evidence to Decision (EtDs) Tables

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
• **Very low** o Low o Moderate o High o No included studies		100% Very low

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Important uncertainty or variability o Possibly important uncertainty or variability • **Probably no important uncertainty or variability** o No important uncertainty or variability		100% Probably no important uncertainty or variability

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Favors the comparison • **Probably favors the comparison** o Does not favor either the intervention or the comparison o Probably favors the intervention o Favors the intervention o Varies o Don't know		83.3% Probably favors the comparison 16.7% Favors the comparison

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o No o Probably no • **Probably yes** o Yes o Varies o Don't know		83.3% Probably yes 16.7% Probably no

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o No o Probably no • **Probably yes**		83.3% Probably yes 16.7% Probably no

○ Yes ○ Varies ○ Don't know		

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	**Conditional recommendation against the intervention**	Conditional recommendation for either the intervention or the comparison	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	•	○	○	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

Appendix C - Evidence to Decision (EtDs) Tables

Immunosuppressed patients, antibiotic duration

Implementation considerations

There could be other outcomes we did not look at, such as drains falling out post operatively

Monitoring and evaluation

Research priorities

Randomized controlled trials, standardizing the type and size of drain used, standardizing the type and duration of post operative antibiotic therapy

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should routine drain placement vs. no routine drain placement be used for pediatric patients undergoing appendectomy for complicated appendicitis?	
POPULATION:	pediatric patients undergoing appendectomy for complicated appendicitis
INTERVENTION:	routine drain placement
COMPARISON:	no routine drain placement
MAIN OUTCOMES:	Organ space infection*; Postoperative drain placement/replacement*; Readmission; Reoperation*;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		100% Yes

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ● **Small** ○ Moderate ○ Large ○ Varies ○ Don't know		83.3% Small 16.7% Moderate

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with no routine drain placement	Risk difference with routine drain placement
Postoperative drain placement/replacement*	379 (1 observational study)	⨁◯◯◯ Very low[a]	**OR 0.57** (0.29 to 1.11)	Study population	
				147 per 1,000	**57 fewer per 1,000** (99 fewer to 14 more)

a. Fragility index of 0 and non-significant confidence interval.

Appendix C - Evidence to Decision (EtDs) Tables

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Large ● **Moderate** ○ Small ○ Trivial ○ Varies ○ Don't know		83.3% Moderate 16.7% Small

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with no routine drain placement	Risk difference with routine drain placement
Organ space infection*	571 (2 observational studies)	⨁◯◯◯ Very low[a,b,c]	**OR 2.01** (0.83 to 4.87)	Study population	
				186 per 1,000	**57 more per 1,000** (10 fewer to 187 more)
Readmission	2141 (2 observational studies)	⨁◯◯◯ Very low[d]	**OR 1.14** (0.55 to 2.40)	Study population	
				34 per 1,000	**5 more per 1,000** (15 fewer to 44 more)
Reoperation*	2141 (2 observational studies)	⨁⨁◯◯ Low	**OR 2.04** (1.06 to 3.94)	Study population	
				19 per 1,000	**19 more per 1,000** (1 more to 52 more)

a. This outcome included a study rated at high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the two groups.
b. The studies contributing to this outcome had non-overlapping confidence intervals.
c. Fragility index of 0.
d. Non-significant confidence interval

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● **Very low** ○ Low ○ Moderate ○ High ○ No included studies		100% Very low

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

Appendix C - Evidence to Decision (EtDs) Tables

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ○ Possibly important uncertainty or variability ● **Probably no important uncertainty or variability** ○ No important uncertainty or variability		100% Probably no important uncertainty or variability

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Favors the comparison ● **Probably favors the comparison** ○ Does not favor either the intervention or the comparison ○ Probably favors the intervention ○ Favors the intervention ○ Varies ○ Don't know		83.3% Probably favors the comparison 16.7% Favors the comparison

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		83.3% Probably yes 16.7% Probably no

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		83.3% Probably yes 16.7% Probably no

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies

Appendix C - Evidence to Decision (EtDs) Tables

	JUDGEMENT						
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	**Conditional recommendation against the intervention**	Conditional recommendation for either the intervention or the comparison	Conditional recommendation for the intervention	Strong recommendation for the intervention
○	•	○	○	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

Immunosuppressed patients, antibiotic duration

Implementation considerations

There could be other outcomes we did not look at, such as drains following out post operatively

Monitoring and evaluation

Appendix C - Evidence to Decision (EtDs) Tables

Research priorities

Randomized controlled trials, standardizing the type and size of drain used, standardizing the type and duration of post operative antibiotic therapy

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should Short term postoperative antibiotics vs. long term post operative antibiotics be used for Adult patients undergoing appendectomy for complicated appendicitis?	
POPULATION:	Adult patients undergoing appendectomy for complicated appendicitis
INTERVENTION:	Short term postoperative antibiotics
COMPARISON:	long term post operative antibiotics
MAIN OUTCOMES:	Organ space infection; Required new course of antibiotic; C diff infection; Postoperative drain placement; Hospital length of stay; Readmission; Reoperation; Total complications;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes • **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ○ Small • **Moderate** ○ Large ○ Varies ○ Don't know		Moderate 100%

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with long term post operative antibiotics	Risk difference with Short term postoperative antibiotics
Organ space infection*	80 (1 RCT)	⨁◯◯◯ Very low[a,b,c]	**RR 0.63** (0.16 to 2.46)	Study population	
				122 per 1,000	**45 fewer per 1,000** (102 fewer to 178 more)
C diff infection*	636 (2 observational studies)	⨁◯◯◯ Very low[b,d]	**RR 0.14** (0.01 to 2.59)	Study population	
				10 per 1,000	**9 fewer per 1,000** (10 fewer to 15 more)

Hospital length of stay	80 (1 RCT)	⨁⨁◯◯ Low[a,c]	-	The mean hospital length of stay was **0**	MD **0.9 lower** (1.65 lower to 0.15 lower)
Reoperation*	885 (2 observational studies)	⨁◯◯◯ Very low[b,d,e]	**OR 0.82** (0.26 to 2.62)	Study population	
				98 per 1,000	**16 fewer per 1,000** (70 fewer to 123 more)
Total complications	80 (1 RCT)	⨁◯◯◯ Very low[a,b,c]	**RR 0.61** (0.27 to 1.40)	Study population	
				293 per 1,000	**114 fewer per 1,000** (214 fewer to 117 more)

a. "Allocation to the short treatment group was violated in seven (17.9%) cases where antibiotic therapy was extended by the treating physician."
b. The confidence interval of this outcome is non-significant.
c. This outcome is based on one study with an N= 80.
d. This outcome had a fragility index of 0.
e. This outcome includes data from studies rated high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the intervention and comparison arms.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Large ○ Moderate ○ Small ● **Trivial** ○ Varies ○ Don't know		Trivial 83% Small 17%

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with long term post operative antibiotics	Risk difference with Short term postoperative antibiotics
Required new course of antibiotic	80 (1 RCT)	⨁◯◯◯ Very low[a,b,c]	**RR 1.05** (0.23 to 4.90)	Study population	
				73 per 1,000	**4 more per 1,000** (56 fewer to 285 more)
Postoperative drain placement	80 (1 RCT)	⨁◯◯◯ Very low[a,b,c]	**RR 1.05** (0.16 to 7.10)	Study population	
				49 per 1,000	**2 more per 1,000** (41 fewer to 298 more)
Readmission*				Study population	

	80 (1 RCT)	⨁◯◯◯ Very low[a,b,c]	**RR 1.05** (0.23 to 4.90)	73 per 1,000	**4 more per 1,000** (56 fewer to 285 more)	

a. "Allocation to the short treatment group was violated in seven (17.9%) cases where antibiotic therapy was extended by the treating physician."
b. The confidence interval of this outcome is non-significant.
c. This outcome is based on one study with an N= 80.

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
• **Very low** o Low o Moderate o High o No included studies		Very low 100%

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Important uncertainty or variability o Possibly important uncertainty or variability • **Probably no important uncertainty or variability** o No important uncertainty or variability		Probably no important uncertainty or variability 83% Possibly important uncertainty or variability 17%

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Favors the comparison o Probably favors the comparison o Does not favor either the intervention or the comparison o Probably favors the intervention • **Favors the intervention** o Varies o Don't know		Favors the intervention 83% Probably favors the intervention 17%

Acceptability

Is the intervention acceptable to key stakeholders?

Appendix C - Evidence to Decision (EtDs) Tables

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		Yes 100%

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		Yes 83% Probably yes 17%

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	**Yes**		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	**Moderate**	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	**Trivial**		Varies	Don't know
CERTAINTY OF EVIDENCE	**Very low**	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	**Probably no important uncertainty or variability**	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	**Favors the intervention**	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	**Yes**		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	**Yes**		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	Conditional recommendation against the intervention	Conditional recommendation for either the intervention or the comparison	**Conditional recommendation for the intervention**	Strong recommendation for the intervention
○	○	○	•	○

100%

CONCLUSIONS

Recommendation

Appendix C - Evidence to Decision (EtDs) Tables

Justification

Subgroup considerations

immunocompromised

Implementation considerations

patient education, physician education (ID, primary care physicians, hospitalists)

Monitoring and evaluation

monitoring infection rate/readmission rate

Research priorities

specifying how short a course is acceptable/efficacious

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should Short term postoperative antibiotics vs. long term post operative antibiotics be used for Pediatric patients undergoing appendectomy for complicated appendicitis?	
POPULATION:	Pediatric patients undergoing appendectomy for complicated appendicitis
INTERVENTION:	Short term postoperative antibiotics
COMPARISON:	long term post operative antibiotics
MAIN OUTCOMES:	Organ space infection; Required new course of antibiotics; C diff infection; Postoperative drain placement; Hospital length of stay; Readmission; Reoperation;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ○ Small ● **Moderate** ○ Large ○ Varies ○ Don't know		Moderate 100%

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with long term post operative antibiotics	Risk difference with Short term postoperative antibiotics
Organ space infection*	788 (2 RCTs)	⨁⨁◯◯ Low[a,b]	**RR 0.98** (0.75 to 1.28)	Study population	
				207 per 1,000	**4 fewer per 1,000** (52 fewer to 58 more)
				Study population	

Required new course of antibiotics	179 (1 observational study)	⨁◯◯◯ Very low[a,b,c]	**OR 0.93** (0.45 to 1.94)	207 per 1,000	**12 fewer per 1,000** (102 fewer to 129 more)
C diff infection*	686 (1 RCT)	⨁⨁◯◯ Low[a,b]	**RR 0.64** (0.18 to 2.25)	Study population	
				18 per 1,000	**6 fewer per 1,000** (15 fewer to 22 more)
Postoperative drain placement	1010 (3 observational studies)	⨁◯◯◯ Very low[a,b,c,d,e]	**OR 0.75** (0.52 to 1.09)	Study population	
				148 per 1,000	**33 fewer per 1,000** (65 fewer to 11 more)
Hospital length of stay	788 (2 RCTs)	⨁⨁◯◯ Low[a]	-	The mean hospital length of stay was **0**	MD 0.33 **lower** (4.03 lower to 3.38 higher)
Readmission*	686 (1 RCT)	⨁⨁◯◯ Low[a,b]	**RR 0.44** (0.21 to 0.91)	Study population	
				65 per 1,000	**37 fewer per 1,000** (52 fewer to 6 fewer)

a. The confidence interval for this outcome is non-significant.
b. The fragility index for this outcome is 0.
c. This study was rated unclear risk of bias on the Newcastle Ottawa scale due to lack of information about follow up.
d. This outcome includes results from studies rated high risk of bias on the Newcastle Ottawa scale due to concerns over comparability of the two groups.
e. This outcome includes results from studies rated high risk of bias on the Newcastle Ottawa scale due to concerns over their selection criteria.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Large ○ Moderate ● **Small** ○ Trivial ○ Varies ○ Don't know		Small 83% Trivial 17%

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with long term post operative antibiotics	Risk difference with Short term postoperative antibiotics
Reoperation	686 (1 RCT)	⨁⨁◯◯ Low[a,b]	**RR 6.72** (0.35 to 129.62)	Study population	
				0 per 1,000	**0 fewer per 1,000** (0 fewer to 0 fewer)

a. The confidence interval for this outcome is non-significant.

	b. The fragility index for this outcome is 0.	

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
• **Very low** o Low o Moderate o High o No included studies		very low 100%

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Important uncertainty or variability o Possibly important uncertainty or variability • **Probably no important uncertainty or variability** o No important uncertainty or variability		Probably no important uncertainty or variability 83% Possibly important uncertainty or variability 17%

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
o Favors the comparison o Probably favors the comparison o Does not favor either the intervention or the comparison • **Probably favors the intervention** o Favors the intervention o Varies o Don't know		Probably favors the intervention 100%

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS

○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		Yes 100%

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		Yes 100%

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	**Yes**		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	**Moderate**	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	**Small**	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	**Very low**	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	**Probably no important uncertainty or variability**	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	**Probably favors the intervention**	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	**Yes**		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	**Yes**		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	Conditional recommendation against the intervention	Conditional recommendation for either the intervention or the comparison	**Conditional recommendation for the intervention**	Strong recommendation for the intervention
○	○	○	•	○

100%

CONCLUSIONS

Recommendation

Appendix C - Evidence to Decision (EtDs) Tables

Justification

Subgroup considerations

immunocompromised

Implementation considerations

patient education, physician education (ID, primary care physicians, hospitalists)

Monitoring and evaluation

monitoring infection rate/readmission rate

Research priorities

specifying how short a course is acceptable/efficacious

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

QUESTION

Should Interval appendectomy vs. observation be used for adults with complicated appendicitis?	
POPULATION:	adults with complicated appendicitis
INTERVENTION:	Interval appendectomy
COMPARISON:	observation
MAIN OUTCOMES:	Death; Length of stay; Return to OR short term <30d; Return to OR long term >30d; Abscess; Drain; Malignancy;
SETTING:	
PERSPECTIVE:	
BACKGROUND:	
CONFLICT OF INTERESTS:	

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ○ Small ○ Moderate ● **Large** ○ Varies ○ Don't know	Adult malignancy rate: Interval appendectomy 14% (CI 8%-22%) based on 7 studies. I2 77% Observation 10% (CI 1%-67%) based on 2 studies. I2 98% Reoperation short term <30d Interval appendectomy 2% (CI 1%-5%) based on 4 studies. Observation 3% (CI 0%-23%) based on 3 studies. I2 74%	

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with observation	Risk difference with Interval appendectomy
Death	170 (1 observational study)	⨁◯◯◯ Very low[a,b]	**OR 0.14** (0.01 to 2.63)	Study population	
				47 per 1,000	**40 fewer per 1,000** (47 fewer to 68 more)
Return to OR short term <30d	52 (1 RCT)	⨁⨁◯◯ Low[b]	**RR 0.36** (0.02 to 8.43)	Study population	
				37 per 1,000	**24 fewer per 1,000**

					(36 fewer to 275 more)
Return to OR long term >30d*	52 (1 RCT)	⨁⨁⨁⨁ High[c]	**RR 0.03** (0.00 to 0.43)	Study population	
				704 per 1,000	**683 fewer per 1,000** (704 fewer to 401 fewer)
Neoplasm*	52 (1 RCT)	⨁⨁◯◯ Low[c,d]	**RR 0.36** (0.11 to 1.18)	Study population	
				333 per 1,000	**213 fewer per 1,000** (297 fewer to 60 more)

a. The included study was rated high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the two groups.
b. This outcome had a low event rate and is very fragile.
c. This outcome was underpowered.
d. This outcome's confidence interval crosses from meaningful harm to meaningful benefit.

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Large ○ Moderate ○ Small ● **Trivial** ○ Varies ○ Don't know		

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects* (95% CI)	
				Risk with observation	Risk difference with Interval appendectomy
Length of stay	29 (1 observational study)	⨁◯◯◯ Very low[a,b,c]	-	The mean length of stay was **0**	MD **0.33 higher** (3.41 lower to 4.07 higher)
Abscess	52 (1 RCT)	⨁⨁◯◯ Low[b,c]	**RR 3.23** (0.14 to 75.83)	Study population	
				0 per 1,000	**0 more per 1,000** (0 fewer to 0 fewer)
Drain	52 (1 RCT)	⨁⨁◯◯ Low[c,d]	**RR 3.23** (0.14 to 75.83)	Study population	
				0 per 1,000	**0 more per 1,000** (0 fewer to 0 fewer)

a. The included study was rated high risk of bias on the Newcastle Ottawa scale due to concerns over the comparability of the two groups.
b. This outcome was underpowered.
c. This outcome's confidence interval crosses from meaningful harm to meaningful benefit.
d. This outcome had a low event rate and is very fragile.

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Very low ● **Low** ○ Moderate ○ High ○ No included studies		100% low

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ○ Possibly important uncertainty or variability ○ Probably no important uncertainty or variability ● **No important uncertainty or variability**		Considerations – some patients may be more concerned about recurrent disease or risk of malignancy

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Favors the comparison ○ Probably favors the comparison ○ Does not favor either the intervention or the comparison ○ Probably favors the intervention ● **Favors the intervention** ○ Varies ○ Don't know		

Equity

What would be the impact on health equity?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS

○ Reduced ○ Probably reduced ○ Probably no impact ○ Probably increased ○ Increased ○ Varies ○ Don't know		Un or underinsured patients who cannot get an interval appendectomy covered. Access to colonoscopy post appendicitis. Further imaging scans.

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● **Probably yes** ○ Yes ○ Varies ○ Don't know		

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ○ Probably yes ● **Yes** ○ Varies ○ Don't know		

SUMMARY OF JUDGEMENTS

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Appendix C - Evidence to Decision (EtDs) Tables

Strong recommendation against the intervention	Conditional recommendation against the intervention	Conditional recommendation for either the intervention or the comparison	**Conditional recommendation for the intervention**	Strong recommendation for the intervention
○	○	○	•	○

CONCLUSIONS

Recommendation

Justification

Subgroup considerations

All neoplasms from the RCT were found in patients aged 40 and older-> would be more likely to operate with increasing age.
Frail or high-risk operative candidates -> need to weigh risk benefit of taking such a patient to the OR if they have little anticipated survival.
More likely to recommend operation in patients with personal or family history of colorectal or gastrointestinal cancer.

Implementation considerations

Monitoring and evaluation

Long term outcomes in younger patients who are managed with continued expectant management.

Research priorities

Long term outcomes in younger patients who are managed with continued expectant management.

Appendix C - Evidence to Decision (EtDs) Tables

REFERENCES SUMMARY

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