National Institute for Health and Care Excellence

Consultation

Diverticular Disease

Costing analysis: Management of acute diverticulitis with computed tomography and antibiotics

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Economic analysis report

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1.1 Introduction

New economic analysis was prioritised in this area as currently not all people referred to hospital with diverticulitis get a CT scan. The committee wanted to see the net impact of CT on costs after accounting for the effect on other hospital costs, including length of stay.

The clinical review (Chapter H) found a substantial (although not statistically significant) difference between oral antibiotics compared with control (no antibiotics) for the outcome hospitalization within 6 months of follow-up in people with uncomplicated acute diverticulitis.

1.2 Methods

1.2.1 Model overview

1.2.1.1 Comparators

The economic analysis assessed the cost of different management strategies using antibiotics for people with suspected acute diverticulitis in the secondary care setting. The committee felt that all people presenting in secondary care with suspected acute diverticulitis should be given an initial dose of intravenous antibiotics, aligning with the evidence identified in the clinical review for this question. Treatment with intravenous antibiotics might then be continued, or people with uncomplicated disease might be switched to either no antibiotics or oral antibiotics. CT imaging is required in order to determine whether someone has uncomplicated disease and may be switched from intravenous antibiotics. The costs of three strategies were therefore calculated in this analysis:

1. CT and then no antibiotics: Initial intravenous antibiotics and CT, followed by a switch to no antibiotics for people with uncomplicated acute diverticulitis
2. CT and then oral antibiotics: Initial intravenous antibiotics and CT, followed by a switch to oral antibiotics for people with uncomplicated acute diverticulitis
3. Intravenous antibiotics: No CT scan and so intravenous antibiotics continued throughout admission (5 days)

1.2.1.2 Population

People with suspected complicated or severe acute diverticulitis, who have been referred to hospital.

1.2.1.3 Time horizon, perspective, discount rates used

An NHS cost perspective was adopted. A time horizon of 6 months was used because there is evidence of a reduction in hospitalisation between antibiotics within 6 months (See Chapter H). As the time horizon was shorter than 1 year, costs were not discounted.

1.2.2 Approach to analysis

A decision tree (Figure 1) was constructed to calculate the costs of the three strategies. The decision tree simply apportions patients to either early discharge and treatment in the community or continued in-hospital treatment with antibiotics. This is done based on whether

they are assessed to have uncomplicated diverticulitis on CT scan. For those that are uncomplicated, some will have a readmission. The probability of readmission is dependent on whether they continued on antibiotics.

The costs included are the costs associated with intravenous antibiotic treatment (staff, drugs and consumables), oral antibiotics, hospital stay and readmission.

Various scenario analyses were undertaken to test the robustness of assumptions.

The health economic analysis was developed in consultation with the committee; model structure, inputs and results were presented to and discussed with the committee for clinical validation and interpretation.

The cost analysis was peer reviewed by a second experienced health economist from the National Guideline Centre; this included systematic checking of the calculations.

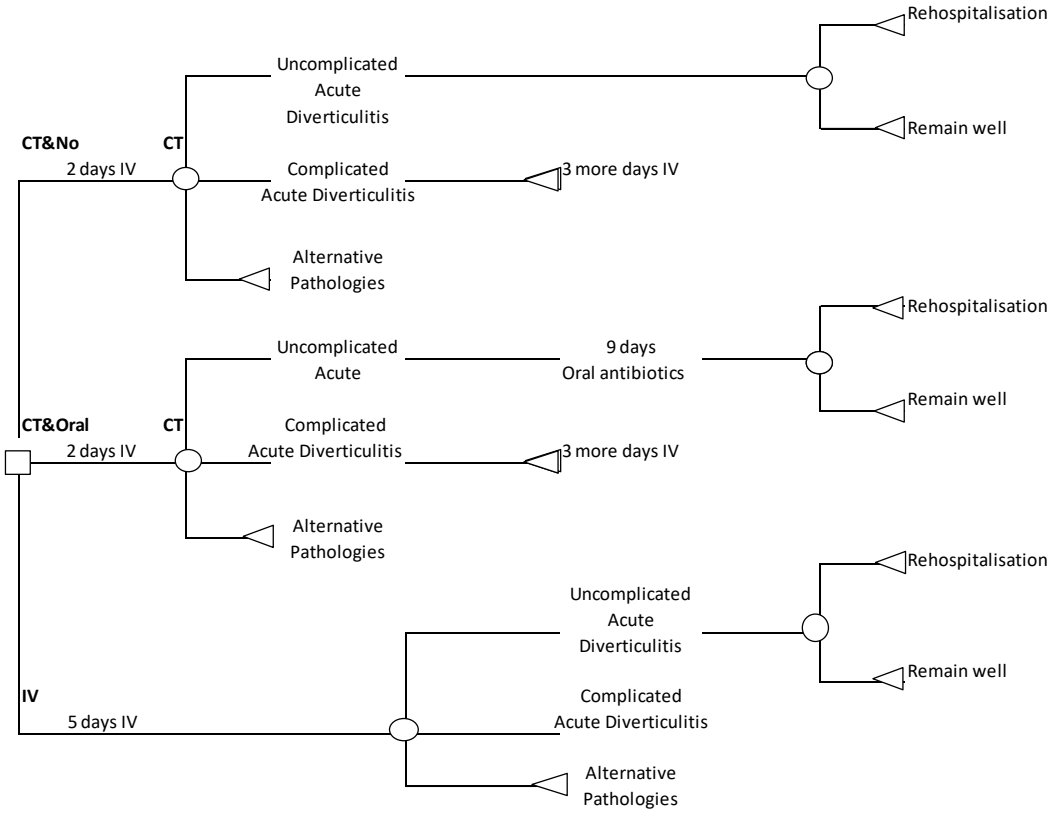

Figure 1: Decision tree: antibiotic management strategies for suspected acute diverticulitis

1.2.3 Key assumptions

- CT was assumed to discriminate between uncomplicated acute diverticulitis, complicated diverticulitis and other pathologies.
- Patients with **uncomplicated diverticulitis**
  - 'CT and no antibiotics' strategy
    - 2 days of IV antibiotics as inpatient
  - 'CT and oral antibiotics' strategy
    - 2 days of IV antibiotics as inpatient, 1 day of oral antibiotics as inpatient, 9 further days of oral antibiotics after discharge
  - 'IV antibiotics' strategy
    - 5 days or IV antibiotics

- Patients with **complicated acute diverticulitis**
  - IV antibiotics as inpatient for 5 days regardless of which strategy they are in.
- Patients with **alternative pathologies** such as colonic cancer, gynaecological pathology, appendicitis, etc.
  - A length of stay of 5 days regardless of which strategy they are in.
  - CT strategies – IV antibiotics for 2 days
  - IV antibiotics strategy - IV antibiotics for 5 days
- Patients were assumed not to deteriorate or progress from uncomplicated to complicated diverticulitis during the index hospital admission.

The timing of CT was varied in Scenarios 7 and 8 (see below).

1.2.4 Unit costs

Table 1: UK cost of antibiotics

Drug	Assumed daily dose[(a)]	Cost per unit (£)	Cost per day (£)	Source
Intravenous antibiotics				
Co-Amoxiclav 1000mg/200mg powder for solution for injection	1000mg/ 200mg every 8 hours by intravenous infusion	£1.06	£3.18	BNF
Metronidazole500mg /100ml infusion 100ml bags[(b)]	3 x 500mg daily by intravenous infusion	£3.19	£9.57	BNF
Piperacillin 2g/ Tazobactam 250mg powder for solution for injection vials	4.5g every 8 hours by intravenous infusion	£7.65	£22.95	NHS Drug Tariff
Cefuroxime 750mg powder for solution for injection vials[(b)]	1.5g every 8 hours; by intravenous infusion	£2.52	£7.56	BNF
Oral antibiotics				
Co-Amoxiclav 500mg/125mg tablets	3 x 500mg/125mg tablets daily	£0.08	£0.24	NHS Drug Tariff
Ciprofloxacin 500 mg tablets	2x 500mg tablets daily	£0.08	£0.16	NHS Drug Tariff
Metronidazole 400mg tablets	3 x 400mg daily	£0.12	£0.36	NHS Drug Tariff
Cefalexin 500mg tablets	500mg every 8 hours	£0.08	£0.24	NHS Drug Tariff

(a) Dosages for adults, British National Formulary
(b) Intravenous cefuroxime and metronidazole are given as separate infusions for the first two doses and together thereafter.

Drug costs were taken from the NHS electronic drug tariff[7] where available and otherwise from the British National Formulary (BNF) [6] (Table 1). Other costs were obtained from the NHS reference costs[5], Personal Social Services Research Unit (PSSRU) [3] and NHS supply chain catalogues[8], supplemented by committee assumptions as required.

Intravenous drip was selected as the route of administration of intravenous antibiotics rather than injection, as the committee favoured this method of administration due to the lower demand on nurse time (Table 2).

Table 2: UK costs of consumables for intravenous antibiotics

Description	Unit Cost	Cost per infusion	Source
Sodium Chloride 0.9% infusion 100ml polyethylene bottles	£0.55	£0.55	BNF
Water for injections 10ml ampoules	£0.26	£0.53	BNF
BD Venflon (IV Cannula ported with wings, White 17G x 45mm PTFE)	£0.87	£0.87	NHS Supply Chain Catalogue
Needles	£0.09	£0.18	Committee members
10ml syringes	£0.04	£0.04	Committee members
IV giving set	£3.00	£3.00	Committee members
Consumable cost per infusion		**£5.17[a]**	
Venflon Dressing (online price)	£0.51	£0.51	Committee members
Chloroprep (Pre-packed unit for infection control)	£0.30	£0.30	Committee members
Consumable cost per 3 days		**£0.81**	

a. For metronidazole Consumable cost is £4.09. It does not incur the cost of water for injection or infusion fluid, as metronidazole is available as a 100ml infusion bag

The NHS reference costs 2016-17 [5] were used to find cost estimates for non-elective excess bed days for people admitted with a primary diagnosis of diverticular disease of large intestine without perforation or abscess, without interventions. This was used as the cost of a bed day (Table 3).

NHS reference costs were also used to find cost estimates for rehospitalisation. The committee considered that the cost of a rehospitalisation in the base case would be best represented by 'non-malignant gastrointestinal tract disorders, with single intervention' but alternative cost codes were also considered:

- 'non-malignant gastrointestinal tract disorders, without interventions (Scenario 11)
- 'non-malignant gastrointestinal tract disorders, with multiple interventions'' (Scenario 12).

We also conducted a threshold analysis on the cost of rehospitalisation (Scenario 13).

Table 3: Resource use and unit costs

Description	Unit Cost	Source
Nurse time		
Nurse (unweighted average band 5-7) cost per working hour (IV treatment)	£45.33	PSSRU 2017
Nurse (unweighted average band 4-7) cost per working hour (oral treatment)	£41.00	PSSRU 2017
Imaging		
RD21A Computerised Tomography Scan of One Area, with Post-Contrast Only, 19 years and over	£105.78	NHS Reference Costs, 2016-2017
RD02A Magnetic Resonance Imaging Scan of One Area, with Post-Contrast Only, 19 years and over	£201.53	NHS Reference Costs, 2016-2017
Non-elective bed days for a diagnosis of diverticular disease (ICD code K573)		
Non-elective excess bed day for Non-Malignant Gastrointestinal Tract Disorders without Interventions	£291.19	NHS Reference Costs, 2016-2017
Rehospitalisation for a diagnosis of diverticular disease (ICD code K573)		
Non-Malignant Gastrointestinal Tract Disorders with Multiple Interventions; As recorded for non-elective short stay and long stay, inclusive of excess bed days and weighted for complications and co morbidities for HRG codes: FD10A, FD10B, FD10C and FD10D	£5,516.68	NHS Reference Costs, 2016-2017
Non-Malignant Gastrointestinal Tract Disorders with Single Intervention; As recorded for non-elective short stay and long stay, inclusive of excess bed days and weighted for complications and co morbidities for HRG codes: FD10E, FD10F, FD10G and FD10H	£3,118.60	NHS Reference Costs, 2016-2017
Non-Malignant Gastrointestinal Tract Disorders without Interventions; As recorded for non-elective short stay and long stay, inclusive of excess bed days and weighted for complications and co morbidities for HRG codes: FD10J, FD10K, FD10L and FD10M	£1,166.19	NHS Reference Costs, 2016-2017

Co-Amoxiclav was the antibiotic chosen for the base case analysis, for both oral and intravenous therapy. The cost of inpatient intravenous antibiotic therapy (drug, consumables and nurse time) was estimated to be £41.62 per day in the base case, as given in Table 4. Likewise, the cost of inpatient oral antibiotic therapy was estimated to be £4.34 per day. The alternative antibiotics were used in scenarios 5 and 6. In Scenario 18 it was assumed that the nurse's time during infusion would not be used for other tasks. Scenario 17 was a threshold analysis on the cost of oral antibiotics.

For imaging the mean cost of a computed tomography (CT) scan was used in the base case (£106). In two sensitivity analyses, we used the mean cost (£202) of a magnetic resonance imaging (MRI) scan and the upper quartile cost (£274) of an MRI scan. In addition, a threshold analysis was conducted on the imaging cost.

Table 4: Base case antibiotic treatment resource use

Description	Resource use per day	Assumption	Source	Unit Cost	Cost per course
Initial intravenous antibiotics per day					
Co-Amoxiclav 1000mg/200mg - infusions	3	1000mg/ 200mg every 8 hours by intravenous infusion, 48 hours total	BNF, GC	£1.06	£3.18
Nurse time (average band 5-7) hours - preparation	0.5	5 minutes for preparation, 5 minutes for readying patient	GC	£45.33	£22.67
Nurse (average band 5-7) hours-infusion	0 [1.5 in Scenario 18]	Give intermittently in Sodium chloride 0.9% over 30–40 minutes.(30 used)	BNF	£45.33	£0 [£68.00]
Sets of consumables per infusion	3	Table 2	GC	£5.17	£15.50
Consumables (venflon, chloroprep)	1/3	Table 2	GC	£0.81	£0.27
Total			**£41.61** [£109.61 in Scenario 18]		
Oral antibiotics (inpatient) per day					
Co-Amoxiclav 500mg/125mg tablets (oral)	3	3 x tablets daily, 1 day oral antibiotics	BNF, GC	£0.08	£0.24
Nurse time (average band 4-7) hours	0.1	2 minutes of nurse time per oral antibiotic	GC	£41.00	£4.10
Total					**£4.34**

1.2.5 Prevalence of uncomplicated diverticulitis

The prevalence of complicated acute was informed by published literature and committee assumptions (Table 5). The three published studies seemed to suggest different estimates of the prevalence of complicated diverticular disease among people admitted for diverticulitis.

- 11% in a Cohort study of 3222 patients with diverticulitis in Minnesota, USA[1]
- 3% in the DIABLO trial that compared watchful waiting with antibiotic treatment for a first episode of CT-proven uncomplicated acute diverticulitis. Only 3% of screened patients were ineligible due to having uncomplicated diverticulitis.[4]
- 26% of 11,389 patients that had a CT of the abdomen during an admissions for diverticulitis in New Zealand, assuming those that had surgery or drainage had a complication.[9]

The estimate from Minnesota cohort was used in the base case. The other estimates were used in Scenarios 2 & 3. In scenario 4, a threshold analysis was conducted; the prevalence of complicated acute diverticulitis was varied to determine the tipping point at which the results of the costing analysis would change.

Table 5: Prevalence of conditions

Condition	Prevalence		
	Base case	Scenario 2	Scenario 3
Uncomplicated acute diverticulitis	87%	95%[c]	72%
Complicated acute diverticulitis	11%[a]	3%[d]	26%[e]
Other pathologies	2%[b]	2%[b]	2%[b]

Sources
a: 525 complications out of a total of 4798 episodes of acute diverticulitis in a sample of 3222 patients with diverticulitis in Olmstead county Minesota between 1980 and 2007 (Bharucha 2015)[1]
b: Calculated from proportion uncomplicated and complicated acute diverticulitis in people screened for eligibility for DIABOLO RCT. [4]
c: n=570 included of 893 screened for eligibility for DIABOLO RCT. n=14 wrongfully included as confirmed not to have diverticulitis or to have complicated diverticulitis. n=323 excluded. Reasons for exclusion: n= 29 had no ultrasound/CT proven diagnosis of Hinchey 1a or 1b diverticulitis. n=294 had uncomplicated disease. 850/893 = 95% uncomplicated acute diverticulitis. [4]
d: 3% screened for eligibility for DIABOLO RCT had complicated diverticulitis [4]
e: Vather cohort study. n=11,389 had CT abdomen. Assume all those who underwent surgery and percutaneous had CT-confirmed complicated disease. n=2,984. 2,984/11,389 = 26% [9]

1.2.6 Rehospitalisation

The clinical review (Chapter H) found a substantial (although not statistically significant) difference between oral antibiotics compared with control (no antibiotics) for the outcome hospitalisation within 6 months of follow-up in people with uncomplicated acute diverticulitis. No clinically important difference was observed between intravenous compared with oral antibiotics, or between short and long courses of antibiotics for any outcomes. Therefore, hospitalisation within 6 months in people with uncomplicated acute diverticulitis was incorporated in to the cost analysis.

The evidence was from a single randomised controlled trial[4]. . The study reported for each arm both:

- The number of patients having one or more admission (as reported in the guideline clinical review – see Chapter H) and
- The total number of admissions.

The latter is more relevant for this analysis since the cost should reflect the total number of events. For the uncomplicated diverticulitis patients in the oral antibiotics arm, the re-hospitalisation rate at 6 months was 35 admissions for 266 patients =13.1 per 100 patients. In the no antibiotics arm re-hospitalisation was 25.2 per 100 patients, with a rate ratio of 1.92. In the model base case, the same rate of rehospitalisation was assumed for people with intravenous antibiotics as for oral antibiotics. In Scenarios 14 & 19, we assumed no rehospitalisation in the intravenous antibiotics strategy. Scenario 15 was a threshold analysis on the rehospitalisation rate ratio.

1.2.7 Sensitivity analyses

Various scenario analyses were undertaken to test the robustness of assumptions. In these, one or more inputs were changed and the analysis rerun to evaluate the impact on results. These scenarios were:

1. Base case:
    a. Antibiotic type: Co-amoxiclav (for both intravenous and oral treatment);
    b. Prevalence of complicated acute diverticulitis: 11%;
    c. Timing of CT: 1 day (Duration of initial intravenous antibiotics: 2 days)
    d. Imaging cost: £106
    e. Rehospitalisation rate following treatment with intravenous antibiotics the same as oral antibiotics;
    f. Rehospitalisation costs £3119
    g. Duration of oral antibiotics: 10 days.

Prevalence

2. Prevalence of complicated acute diverticulitis: 3%
3. Prevalence of complicated acute diverticulitis: 26%
4. Threshold analysis for prevalence of complicated acute diverticulitis

Alternative antibiotic regimens

5. Regimen type 2: both cefuroxime and metronidazole (intravenous) and cephalexin/metronidazole (oral)
6. Regimen type 3: piperacillin/tazobactam (intravenous) and ciprofloxacin/metronidazole (oral)

20. Duration of oral antibiotics: 5 days

Timing of CT (which determines the potential savings from early discharge)

7. Timing of CT: 2 days (Duration of initial intravenous antibiotics: 3 days)
8. Threshold analysis for the timing of CT

Imaging cost

9. MRI cost
10. High MRI cost

16. Threshold analysis for imaging cost

Rehospitalisation cost

11. Low rehospitalisation costs - NHS reference cost ‘without intervention’.
12. High rehospitalisation costs - NHS reference cost ‘multiple interventions’.
13. Threshold analysis for the cost of rehospitalisation.

Rehospitalisation rate

14. Zero rehospitalisations for ‘Intravenous antibiotics only’ strategy
15. Threshold analysis for the risk ratio for rehospitalisation.

Other

17. Threshold analysis for oral antibiotic cost
18. Include nurse time during infusion
19. Zero rehospitalisations for ‘Intravenous antibiotics only’ strategy AND high rehospitalisation cost

1.3 Results

1.3.1 Base case analysis

Table 6 shows the results of the base case analysis broken down by type of cost. The oral antibiotic strategy is the lowest cost strategy followed by no antibiotics.

'CT & oral antibiotics' saved £513 per patient compared with 'IV antibiotics'. The cost of CT was almost entirely offset by the cost of IV and then the savings came from the reduced hospital stay.

Comparing 'CT & no antibiotics' with 'CT & oral antibiotics' the reduced hospital stay (1 day in uncomplicated patients) was more than offset by the cost of re-hospitalisation.

Table 6: Base case analysis results

	Mean cost					
Strategy	**CT**	**IV antibiotics**	**Oral antibiotics**	**Hospital stay**	**Re-hospitalisation**	**Total**
CT & no antibiotics	£106	£97	£0	£695	£684	£1,582
CT & oral antibiotics	£106	£97	£6	£949	£357	£1,514
IV antibiotics	£0	£208	£0	£1,456	£357	£2,021
CT&No vs IV	£106	-£111	£0	-£761	£327	-£439
CT&Oral vs IV	£106	-£111	£6	-£507	£0	-£507

1.3.2 Sensitivity analyses

'CT & oral antibiotics' was the lowest cost strategy in most of the sensitivity analyses (Table 7). 'No antibiotics' was only the lowest cost strategy in the scenario that used the lowest unit cost of a rehospitalisation. 'IV antibiotics' was not the lowest cost strategy for any of the one way sensitivity analyses. It was, though, when it was assumed to have zero readmissions and the cost of a readmission for the other strategies used the high per unit estimate. With that one exception, 'IV antibiotics' was the highest cost strategy throughout and the cost savings from 'CT & oral antibiotics' compared with 'IV antibiotics' ranged from £150 to £688 per patient.

We conducted some threshold analyses to see how far we would have to alter certain parameters before the lowest cost strategy switches (Table 8). Mostly, these yielded estimates that would be implausible. However, 'CT & no antibiotics' could be lowest cost if the risk ratio for readmission was less than 1.73 or the readmission cost was less than £2,474.

In all analyses, we assumed that the length of hospital stay was 5 days in the absence of CT and we assumed that discharge would take place 48 hours after CT in those that were uncomplicated (24 hours in the No antibiotics strategy). Therefore, for there to be a reduced length of stay at all in the model then the CT has to take place within 3 days of admission. The tipping point at which it becomes no longer cost savings was at 2.7 days. Therefore 'CT and oral antibiotics' only needs a reduction in stay of 0.3 days in uncomplicated diverticulitis patients to be cost saving.

Table 7: Sensitivity analysis results

Scenario	Mean cost			Lowest cost strategy	CT & Oral vs IV
	CT & no anti-biotics	CT & oral anti-biotics	IV anti-biotics		
1. Base case	£1,582	£1,514	£2,021	Oral antibiotics	-£507
2. Prevalence of complicated diverticulitis - low	£1,565	£1,491	£2,054	Oral antibiotics	-£563
3. Prevalence of complicated diverticulitis - high	£1,615	£1,559	£1,959	Oral antibiotics	-£400
5. Regimen 2	£1,607	£1,546	£2,075	Oral antibiotics	-£529
6. Regimen 3	£1,681	£1,620	£2,235	Oral antibiotics	-£615
7. Timing of CT =at 2 days	£1,873	£1,805	£2,021	Oral antibiotics	-£216
9. Imaging cost=MRI	£1,678	£1,610	£2,021	Oral antibiotics	-£411
10. Imaging cost=MRI high	£1,750	£1,683	£2,021	Oral antibiotics	-£339
11. Rehospitalisation cost - low	£1,154	£1,291	£1,798	No antibiotics	-£507
12. Rehospitalisation cost - high	£2,108	£1,789	£2,296	Oral antibiotics	-£507
14. Rehospitalisation rate 0 after IV	£1,582	£1,514	£1,664	Oral antibiotics	-£150
18. Include cost of nurse during infusion	£1,740	£1,673	£2,361	Oral antibiotics	-£688
19. Rehospitalisation rate 0 after IV AND high rehospitalisation cost	£2,108	£1,789	£1,664	IV antibiotics	£125
20. Duration of oral antibiotics = 5 days	£1,582	£1,513	£2,021	Oral antibiotics	-£508

Table 8: Threshold analysis results

Scenario	Threshold value	Base case value	Optimal Strategy at threshold
4. Prevalence of complicated diverticulitis	83%	11%	CT&Oral->IV
8. Timing of CT (days)	2.7	1.0	CT&Oral->IV
13. Rehospitalisation cost	£2,474	£3,119	CT&Oral->CT&No
15. Rehospitalisation rate (RR, No vs Oral)	1.73	1.91	CT&Oral->CT&No
16. Imaging cost	£613	£106	CT&Oral->IV
17. Oral antibiotic cost per day	£8.00	£0.24	CT&Oral->CT&No

1.4 Discussion

In the NHS, CT is conducted in some patients admitted to hospital with acute diverticulitis but not in all. Therefore, if routine CT scanning is to be fully implemented, then there will be resource implications. However, in this cost analysis we show that the cost of CT is likely to

be far outweighed by cost savings, if patients with confirmed uncomplicated disease are discharged with a course of oral antibiotics after CT. The earlier that the CT is conducted, the earlier that patients with uncomplicated disease can be discharged, and therefore the bigger the savings. To be cost saving a CT strategy only needs to reduce hospital stay by an average 0.3 days per uncomplicated diverticulitis patient.

These results seemed to be robust to sensitivity analysis. Indeed, there might be further benefits from CT such as:

- cost savings from reduced need for colonoscopy
- directing the treatment of complications
- identifying other pathological causes of symptoms (such as colonic cancer, gynaecological pathology, appendicitis etc.) and reducing time until definitive treatment.

This analysis confirms the findings of the within-trial cost-consequences analysis by Biondi et al[2], which found even larger cost savings (£1,112 per patient) when comparing oral antibiotics with inpatient intravenous antibiotics for uncomplicated diverticulitis in a Spanish setting (see Chapter H). This study also found that quality of life was no worse in the oral antibiotics / early discharge arm.

Withholding all antibiotics from people with CT-confirmed uncomplicated diverticulitis seemed to increase costs compared with oral antibiotics, even when assuming that they had a day less hospital stay. The analysis does not consider the long-term consequences in terms of antimicrobial resistance, which would favour no antibiotics. However, neither does it include other outcomes that trended towards favouring oral antibiotics, including sigmoid resection and death. Overall, the committee felt that stepping down to oral antibiotics was a safe and efficient strategy and that for some patients ceasing all antibiotics would be reasonable. To be sure not to underestimate the cost of oral antibiotics, we assumed duration of 10 days. However, the committee eventually decided to recommend 5 days, to minimise the impact of microbial resistance. The sensitivity analysis on duration of oral antibiotic therapy showed that this had a negligible effect on the results of the cost analysis (but again this does not account for any impact on antimicrobial resistance).

The analysis assumes that CT is accurate at differentiating uncomplicated diverticulitis from complicated diverticulitis and from other pathologies. The committee believe this to be a reasonable assumption, especially with modern scanners. There does not seem to be a non-invasive test that is more accurate and colonoscopy is far more expensive. If it is less than 100% sensitive at detecting complications then this would mean that there is a risk of discharging patients home too early and that their condition might worsen. However, the evidence in Chapter H does not show worse outcomes for patients selected by CT for discharge and treatment with oral antibiotics.

The use of laboratory tests such as c-reactive protein can be used prior to CT to select patients for CT, ruling out diverticulitis in some patients, thus reducing the impact on imaging services.

1.4.1 Evidence statement

An original cost analysis found that ‘CT then discharge with oral antibiotics if uncomplicated’ was cost saving for people with suspected severe or complicated diverticulitis compared to both

- ‘No CT and intravenous antibiotics’; and
- ‘CT then discharge with no antibiotics if uncomplicated’

This was rated as partially applicable with minor limitations.

We rate this analysis as only ‘partially applicable’ because it does not estimate quality-adjusted life-years, as required by the NICE reference case.

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