

CLINICAL ETHICS

The ethics of surgery in the elderly demented patient with bowel obstruction

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J Med Ethics 2002;28:105–108

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Revised version received
18 July 2001
Accepted for publication
19 July 2001

Objective: Little has been written in the medical literature concerning the ethics of treatment of the elderly demented patient with bowel obstruction. It is one example of the issues with which we are becoming increasingly involved. We conducted a survey of our colleagues' opinions to determine current practice.

Design: A postal questionnaire study (62% response rate). Questions were posed that related to a case scenario of an elderly demented patient presenting with a presumed sigmoid volvulus.

Setting: The northern region of England.

Participants: Thirty seven surgical members of the Association of Coloproctology of Great Britain and Ireland, Northern Chapter.

Results: Sixty five per cent of respondents felt that surgery would be inappropriate, and 26% that any intervention at all upon the subject in the case scenario would be inappropriate. More would operate, however, at the request of relatives. An advance directive not to treat would be respected by 70% despite a relative's wishes.

Conclusions: Overall there was a wide variation in the approach of the surgeons to a demented patient with bowel obstruction. In an era of clinical governance, and an increased awareness of the ethics of consent, this study presents one example of the difficult decisions with which we are increasingly faced. The greater use of advance directives may provide one possible solution.

The gulf between what can be done and what should be done expands with innovation. The correct answer to what should be done is perhaps dynamic, changing over time with differing expectations of, and improvements in, treatment. Doctors are increasingly faced with ethical dilemmas that may lead to difficult decisions, complaints, and dissatisfaction for patients, relatives and carers. This paper presents a not infrequent case scenario, the management of an elderly demented patient with bowel obstruction. In the past the medical literature has given standard management guidelines for bowel obstruction from volvulus.¹⁻⁴ When conservative treatment fails it is usually assumed that patients will progress onto surgery. Little has been written, however, on management when the patient is elderly and demented.⁵ The person with dementia may have a different opinion from the medical community as to the level of intervention that should be undertaken.⁶ With a lack of suitable opinion in this area, a survey of the views of local colorectal surgical specialists was undertaken to determine current practice.

METHODS

A postal survey was conducted of all 37 surgical members of the Northern Chapter of the Association of Coloproctology of Great Britain and Ireland. The members were mostly consultant surgeons with a few senior surgical trainees. The following case scenario was presented.

A patient in her late seventies presents with a large bowel obstruction. There is no specific past history of note apart from dementia. The patient is a nursing home resident who has been unable to walk for some time. In addition she has faecal and urinary incontinence and is unable to recognise her relatives or carers. Clinical examination and plain abdominal *x* rays indicate a volvulus as being the likeliest cause of the bowel obstruction. There is no evidence of peritonitis or systemic upset. Rigid sigmoidoscopy at the bedside is unsuccessful in finding the cause of the obstruction, or in

deflating a volvulus. Conservative treatment with enemas and intravenous fluids is unsuccessful.

A series of questions relating to the scenario were posed (table 1). These questions were the likely choices in management that would need to be made. The recipients were also asked to give estimates of life expectancy for patients with different types of dementia. Alzheimer's disease and multi-infarct dementia are the two commonest aetiologies. The answers were taken as a crude measure of the knowledge of the general prognosis of dementia. The respondents were asked to answer each question and then return the question sheet in a prepaid envelope. The results of the survey were anonymous. Mann-Whitney U tests were used to compare estimates of life expectancy between the Alzheimer's and multi-infarct groups, with $p < 0.05$ considered as statistically significant (Minitab version 12.23).

A computerised literature search using Medline was conducted to review the literature concerning emergency surgery in the demented patient. The term dementia was combined with surgery or emergency. The search was limited to papers in the English language. The references to these papers were then checked for appropriate papers.

RESULTS

Of 37 surveys sent out 23 (62%) were returned. Most respondents answered most questions. Where individual questions were not answered, the respondents would sometimes allude to the question in the final section that requested further comments. Table 1 gives the response rate for each question. In the initial management, 13% would perform a simple contrast enema only, 17% would attempt a therapeutic colonoscopy after a contrast enema, and 43% would perform colonoscopy directly with a view to this being therapeutic. Twenty six per cent of respondents would not perform either a contrast enema or a colonoscopy.

Table 1 Questions and answers to the case scenario

Question		Answer (proportion answering yes)
1. In the initial management would you perform		
simple contrast enema only?	Yes/No	3/23
diagnostic colonoscopy?	Yes/No	14/23
therapeutic colonoscopy?	Yes/No	
No intervention		6/23
2. Would you operate or perform further investigations with a view to operating upon this patient?	Yes/No	8/23
3. If peritonitis was evident, would you operate?	Yes/No	7/23
4. If the relatives felt operation should be performed would this change your mind	Yes/No	6/23
5. If the patient had completed an advance directive to withhold treatment, would you comply with this against a relative's wish?	Yes/No	16/23
6. If the level of dementia were different, would you intervene? (the above case is severe)		
Mild	Yes/No	17/23
Moderate	Yes/No	13/23
Would you intervene if the patient were 50 to 60 years old?	Yes/No	14/23
7. What would you expect the life expectancy of a person with dementia to be?	Median number of years (range)	
	Multi-infarct	Alzheimer's type
Mild	5 (1.5–15)	5.5 (1.5–15)
Moderate	3 (0.6–10)	3.5 (1–10)
Severe	1 (0.5–5)	1.5 (0.5–9)
8. Any other comments?		

Thirty five per cent would operate or perform further investigations with a view to operating. Thirty per cent would operate if peritonitis were present. Two who would have performed investigations with a view to operating would not perform an operation if peritonitis were present. One would operate if peritonitis were present whereas they would not have done so without evidence of peritonitis.

Twenty-six per cent would not operate despite a relative's wishes and 26% were uncertain. Seventy per cent would withhold treatment against a relative's wishes if the patient had completed an advance directive. In the patient with mild dementia 74% would operate, if the dementia were moderate 57% would operate. In the younger patient 61% would intervene.

The estimates of life expectancy produced a broad range of answers. Eight did not give an answer or did not know. The remaining 15 respondents gave a numerical estimate. Estimates of survival in mild, moderate, and severe dementias of both types were similar. There was no significant difference in estimates of life expectancy between Alzheimer's type and multi-infarct type dementia for each level of severity.

Nine respondents gave further comments. Several emphasised that "scenarios are harder to interpret than the real situation". Several felt strongly that the case should be discussed with other colleagues—either an anaesthetist, a geriatrician or the patient's general practitioner. In addition discussions with the patient's family were felt to be important, but for a variety of reasons. "I would also involve the family so that there will be a joint discussion regarding further management". "The views of the relatives are of primary importance since they will be the source of any complaints or litigation." ". . . whole decision process depends on the severity of dementia and family pressures." "If the patient can be kept comfortable and is not enjoying life I would do nothing. The ability to perceive and enjoy life is the crucial deciding factor in management." Whether to follow a relative's wish to intervene varied between: "I believe it is immoral to operate on someone because . . . relative's want us to" and "I would suggest strongly that it would be a great kindness to this patient to let nature take its course . . . Unfortunately in the present climate they (the relatives) may reject this advice. If they were to do so . . . it would be better to agree to their wishes and intervene. In this case one would be treating the relatives and not the patient . . . This could prevent a lot of trouble." To summarise the further comments section, respondents indicated that dis-

cussions would be made with colleagues and relatives in this difficult case. Some would not operate against their own judgment despite a relative's wishes, whilst others would. Sometimes the fear of litigation or complaints would sway matters.

COMMENT

Large bowel obstruction in the elderly patient is a frequent, serious surgical emergency. If left untreated the outlook is poor. Carcinoma and diverticulitis are the commonest causes. A volvulus occurs when the bowel twists around its own axis, so producing a simple mechanical obstruction. It accounts for approximately 5% of all cases of bowel obstruction.¹⁻³ Simple treatment with rigid sigmoidoscopy and a flatus tube will often be successful in resolving a sigmoid volvulus.^{2,4} If this is unsuccessful, surgery or endoscopic deflation can be used. If left untreated the volvulus is unlikely to resolve and the obstructed bowel liable to perforate. Discussions on the treatment of volvulus in the medical literature indicate that patients invariably have further intervention if sigmoidoscopic deflation fails. Patients presenting with sigmoid volvulus are often institutionalised because of psychiatric or neurological conditions (26% to 63%).¹⁻³ Emergency surgery is hazardous in this group because of coexisting morbidity, and is associated with a high mortality rate. We were uncertain if this reported experience reflected everyday clinical practice in the patient with dementia. Is the dementia seen as the important issue and not the bowel obstruction? Whereas several papers have discussed the issue of elective surgery in the patient with dementia, few have mentioned dementia in relation to emergency surgery. In the elective setting there is more time to consider the issues of patient autonomy and surrogacy.⁷ There may be a general reluctance to refer older patients especially when they are institutionalised and have additional comorbidity,⁸ although it has been shown that a dedicated geriatric surgery service can improve quality of life and relieve suffering.⁹ Earlier papers concerned with the emergency situation often mention dementia in passing, perhaps as a justification for carrying out less interventional surgery.¹⁰ More recently discussions on the wider issues of autonomy have taken place.^{5,11}

Several ethical issues are raised in the management of the severely demented patient presenting as a surgical emergency. It is unlikely that the patient will have detailed specific

requests before the progression of dementia so others must act as the guardian of their interests. Management decisions are based upon discussions with the family and colleagues if available. However, other health professionals' knowledge of an individual patient may be scanty. Moreover, is it right for a relative to make a decision, based on his or her knowledge of the individual but not of the treatment? Substituted judgment, imagining what choice the individual patient would have made in the circumstances, may be available to the relatives or general practitioner but not the surgeon. In the absence of a defined custodian of the patient's premorbid wishes, the role of guardian often falls to the surgeon by default. The surgeon's perception of the problem will depend upon his or her upbringing, medical training, and current value judgments. The problem will usually be interpreted as requiring either a decision as to the patient's best interests or the application of the reasonable person standard¹⁰: what would be reasonable when all things are considered.¹¹ On the one hand unless the condition can be treated satisfactorily a painful death as a result of the obstructed bowel perforating after several days is likely to result. An operation, however, is likely to have a high mortality and may be regarded as futile. If an operation is successful the patient will most likely be left with a stoma, as current opinion would suggest that this is the safest treatment option. Whilst nursing home staff can manage a stoma it would be perceived as an unpleasant burden at the end of one's days, and would be unlikely to be reversed. Open discussion with the patient's relatives were available will often lead to an agreed management plan. A clash of opinions may occur, however, with the relatives wishing for an operation to be performed against the surgeon's judgment: "it would be better to die under an anaesthetic than suffer". With modern peri-operative care the patient is likely to survive and a protracted postoperative course result. The surgeon may also be conscious of grief, guilt, or even financial motivation on behalf of the relatives (perceived or real) influencing any decision. Alternatively, as seen in some other health care systems, an overzealous approach may lead to the use of non-palliative interventions.¹²

Broader perspectives also exist. Does an operation, protracted postoperative stay and further nursing home expenditure make best use of a health care system's resources?¹³ If not, who should make a decision not to treat: the health care organisation by policy, the institution by protocol or the doctor by judgment? Is it discriminatory to withhold treatment from an individual who does not have the mental capacity to be involved in the decision making process? The Human Rights Convention states that no one shall be deprived of life intentionally, but as witnessed in discussions over the limited access to cardiac transplant in children with Down's syndrome, what may be unlawful may not be interpreted as unethical.¹⁴ Finally when does the debate cross the boundary into a debate on euthanasia?

In this study several of the respondents indicated that the case scenario was overly simplistic and that the answers should be viewed with caution. Our own opinion varied between doing nothing after an unsuccessful sigmoidoscopy to attempting a colonoscopy. Neither of the authors felt it would be appropriate to proceed on to an operation in view of the patient's overall condition and outlook. The factors that influenced the decisions of the respondents would seem to be varied and appeared individual to each surgeon. Twenty six per cent would not perform any intervention at all, whereas 35% would operate, this decision not being altered substantially if immediately life-threatening peritonitis were evident. It is interesting to contrast this approach with other groups of surgeons in similar circumstances. Both a fractured hip and a volvulus are likely to lead to death if a conservative course is pursued and surgery not performed. For two decades orthopaedic surgeons have recommended operating, whenever possible, on institutionalised patients with fractured neck of femur¹⁵ both for pain relief and to improve survival.

The knowledge of the potential life expectancy of a patient with dementia could be expected to influence management decisions. The surgeons in this study were more likely to operate on younger patients or those with milder dementia. Life expectancy with dementia is difficult to measure and estimates differ,¹⁶ but survival is worse in those with multi-infarct dementia than in those with Alzheimer's disease.¹⁷ In addition, institutionalised patients have a much shorter life expectancy.¹⁶ The subject in the scenario would be expected to live for months rather than years. There was a great variation in the spread of answers estimating life expectancy. Those giving numerical answers (57%) gave similar estimates of survival in multi-infarct dementia and Alzheimer's disease. This could be interpreted as meaning that the respondents were willing to make decisions despite a lack of appropriate knowledge. Many realised their lack of knowledge on the subject, however, and stressed their wish to discuss the case with colleagues. It was not possible to associate decisions made by individual respondents with their predictions of life expectancy.

The surgeons would be more likely to operate if the relatives wished so, but from the comment section this would seem to be related to concerns over potential medico-legal actions by the relatives. Seventy per cent of the respondents would respect an advance directive not to treat despite a relative's wishes. Presumably even more would observe a directive if there were agreement between the patient's and the relatives' wishes. An advance directive should be respected where the statement is clearly applicable to the clinical situation.¹⁸ Although not in common use at present it would seem unlikely that a specific reference to bowel obstruction would be present.¹⁹ This may seem no better than the situation that was faced in this study's scenario. The patient who has made an advance directive has, however, probably made an indication as to on the level of intervention that they would wish for in general.²⁰ And this would provide a stronger framework on which to base the discussion of treatment than the paucity of information that is often available. Advance directives do, however, have problems concerning both implementation²¹ and ethics.²² At the present time it is unlikely that a discussion will have taken place between patient, relatives, and carers either before the dementia has progressed, in a general situation,²³ specifically in relation to dementia,²⁴ or during an emergency admission.²⁵ The completion of the necessary paper work and a general lack of knowledge on behalf of carers may prevent wider use of advance directives.²⁶ In financial terms the savings from their implementation may be less than expected.²⁷

"When treating patients in the later years of life, our focus must shift from maximizing survival to maximizing also the quality of life, dignity, and minimizing suffering."²⁸ A decision as to the level of intervention will often be needed in such a case as this study describes. The patient may be unable to consent and there may be a dilemma as to whether to proceed to more aggressive treatment methods. What is the correct decision and who should make it on behalf of the patient? Usually it falls to the hospital specialist with their knowledge of the acute disease and responsibility for its treatment. However, a deficiency of knowledge of conditions such as dementia may cloud management decisions, especially if input from other colleagues is absent. The decision on how actively to treat has always been a difficult problem for doctors, especially when patients are unable to express their wishes. With an increased awareness of the ethics of consent the decisions are becoming harder and more stressful to make. The more frequent use of advance directives may reduce the difficulties in making choices, but would require implementation in the community long before the patient ever reaches the specialist.

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