The ethics of artificial nutrition

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Abstract

The last two decades have been witness to considerable progress in the administration of artificial nutrition and hydration (ANH). This can be used to sustain life in various patient groups that would have previously succumbed to the effects of malnutrition. The complexity of these clinical cases often causes healthcare professionals great anxiety, as the decision to initiate or withdraw ANH has significant emotional, ethical and resource implications. These difficult decisions require considerable deliberation, balancing the judgements and values of patients, their families and carers, and even the cultural beliefs of society at large. This short article looks at the application of contemporary medical ethical principles for guiding decisions and discusses the implications of the Mental Capacity Act, with particular relevance to ANH.

Keywords Artificial nutrition; ethics; Mental Capacity Act; MRCP; nutrition

Key points

- The four principles of medical ethics are autonomy, non-maleficence, beneficence and justice
- Artificial nutrition and hydration is a medical treatment that can be withheld or withdrawn if it is in the patient's best interests
- The concepts of capacity and best interests have been defined in law through the Mental Capacity Act 2005
- The application of ethical principles to artificial nutritional support can guide clinical decision-making

Introduction

In healthy adults, total starvation leads to death from malnutrition within 60–70 days. Functional metabolic deficits become clinically evident after only 10 days of inadequate nutrition in previously healthy individuals (less in those already compromised by disease); psychological and mood disturbance may emerge within 1 day without food. Recent advances in medical technology and pharmacology have allowed nutritional support to be given for indefinite periods in almost all clinical situations, but this has resource and ethical consequences. Most doctors face the dilemmas of 'to treat or not to treat' and 'to withdraw or continue' on a daily basis, but ethical concerns are greatest when the 'treatment' is the provision of food. The application of contemporary medical ethical principles provides a systematic and relatively objective means of resolving these clinical predicaments.

Ethical principles

A convenient and easily understood approach to ethical issues is the so-called 'four principles approach' to biomedical ethics. This approach should be seen not as a rigid framework to solve ethical problems but as a guide to facilitate discussion and resolution of problems. The four principles are autonomy, beneficence, non-maleficence and justice:[1]

- **Autonomy** is the pre-eminent theme in law and observes the patient's right of self-determination to choose or refuse medical treatment.
- **Beneficence** implies that the treatment will have benefit to the patient and be in their best interest.
- **Non-maleficence** is the opposite of this and acts to minimize potential or actual harm resulting from clinical interventions.
- **Justice** is the fair and equitable provision of care to all.

Autonomy

Nutritional support should be considered in all patients whose oral intake is likely to be inadequate for 7 days or more. If the patient can eat normally, they should be encouraged to maintain an adequate intake, which the nutrition team should monitor. If the patient cannot eat, the 'pros and cons' of feeding should be discussed with the patient, with a clear explanation of possible outcomes and morbidity. The patient's autonomy is paramount, and they have the right to refuse therapy or change their mind at any point. If treatment is futile, the doctor has the responsibility to outline this. Appropriate palliative care must be offered, including adequate oral hydration and continuing nursing care.

Most decisions relating to artificial nutrition and hydration (ANH) occur in patients who have a temporary or permanent impairment of cognitive function, for example after a stroke. The Mental Capacity Act 2005 (MCA) states unequivocally that a doctor must assume that the patient has capacity to make decisions unless a lack of capacity has been clearly demonstrated (Table 1). The MCA acknowledges that patients with impaired mental capacity may still have the ability to make some decisions about their care, and efforts should be made to facilitate this where possible. The five main principles of the Act are listed in Table 2.

If the patient lacks capacity, the doctor must establish whether the patient has made an advanced decision, indicating a preference for treatment or non-treatment. This does not have to be a formal, written, witnessed document but must specify which treatment is to be refused and in which circumstances (this can be expressed in lay terms as long as it is understood clearly). If

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The MCA: lack of mental capacity[a]

- A person is unable to make a decision for himself if he is unable
  - to understand the information relevant to the decision
  - to retain that information
  - to use or weigh that information as part of the process of making the decision or – to communicate his decision (whether by talking, using sign language or any other means)
- A person is not to be regarded as unable to understand the information relevant to a decision if he is able to understand an explanation of it given to him in a way that is appropriate to his circumstances (using simple language, visual aids or any other means)
- The fact that a person is able to retain the information relevant to a decision for a short period only does not prevent him from being regarded as able to make the decision
- The information relevant to a decision includes information about the reasonably foreseeable consequences of:
  - deciding one way or another or
  - failing to make the decision

[a] This Act only applies to England and Wales. In Scotland, the legal aspects are covered in the Adults with Incapacity (Scotland) Act 2000.

Table 1

The principles of the MCA

- A person must be assumed to have capacity unless it is established that he/she lacks capacity
- A person is not to be treated as unable to make a decision unless all practicable steps to help him/her to do so have been taken without success
- A person is not to be treated as unable to make a decision merely because he/she makes an unwise decision
- An act done, or decision made, under this Act for or on behalf of a person who lacks capacity must be done, or made, in his/her best interests
- Before the act is done, or the decision is made, regards must be had to whether the purpose for which it is needed can be as effectively achieved in a way that is less restrictive of the person's rights and freedom of action

Table 2

the patient has fully comprehended the implication of their advanced decision, the decision will be binding.

Some patients may also have appointed a Lasting Power of Attorney, who can make decisions relating to personal health, financial and property matters when the patient becomes incapacitated. In the event that the patient has no relatives and lacks capacity, consideration should be given to appointing an Independent Mental Capacity Advocate, particularly if Deprivation of Liberty Safeguards are being considered.[2]

Beneficence and non-maleficence

When making decisions relating to ANH, the doctor must weigh up the benefits of the treatments against the potential harm to the patient. Health professionals often overestimate the perceived benefits of feeding via an enteral tube or percutaneous endoscopic gastrostomy (PEG), particularly in the setting of advanced dementia or terminal illness. A survey of American physicians found that many believed PEG feeding improved nutritional status, reduced aspiration and prevented pressure sores in patients with dementia.[3] The scientific evidence in support of this is sparse, and the short-term mortality rates after PEG placement can be as high as 50% in this patient group. If the risk of ANH outweighs the benefits, it should not be started, and if it has already been started, it should be withdrawn. There is no ethical or legal difference between withholding or withdrawing nutrition, although the latter decision is often more emotive.

When a patient's outcome is uncertain and the benefits of nutritional support are unclear, it is reasonable to agree to undertake a time-limited trial of therapy. The aims and duration of such trials must be clearly recorded.[4] Time-limited trials also ensure that patients are regularly reviewed. Circumstances and clinical conditions often vary, emphasizing the importance of clinicians being prepared to alter their views in response to changing clinical scenarios.

Justice

Clinicians must, at all times, be seen to be transparently honest in their discussions with patients, family members and other interested parties. They must not arbitrarily impose their own value systems or preferred biases for feeding modality in the absence of evidence, and they should not make decisions based on resource considerations. The importance of this is clearly highlighted by the media coverage of 'high-profile' cases such as those of Terri Schiavo and Samuel Golubchuk in the USA.

In some cases, there may be irreconcilable differences of opinion between the family and health professionals. Attempts should be made to resolve these differences locally; a second opinion from an experienced colleague may help. If the dispute cannot be settled in this way, the case should be referred to the Court of Protection for consideration. Serious or controversial matters, such as withdrawing ANH from patients with persistent vegetative states, must also be referred, as clearly stated in the recent General Medical Council guidelines. This process was recently highlighted in the case of W *v* M, in which the mother of M had requested the withdrawal of ANH from her adult child who had contracted viral encephalitis and had been in a minimally conscious state for 8 years.

Religious, ethnic and cultural issues

Modern society is an amalgam of different religious, ethnic and cultural backgrounds and beliefs. Attitudes to end-of-life care and the sanctity of life vary widely between different groups. Additionally, medical staff will inevitably judge patients according to their own morals and beliefs. It is beholden on all those involved to respect these views and wherever possible take account of them in a sympathetic and understanding manner.[5] ◆

KEY REFERENCES

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TEST YOURSELF

To test your knowledge based on the article you have just read, please complete the questions below. The answers can be found at the end of the issue or online here.

Question 1

A 56-year-old man presented with symptoms and signs of gastric outlet obstruction related to a large mass in the pancreatic head. He was unable to tolerate oral fluids. The most likely diagnosis was pancreatic cancer but chronic pancreatitis was also a possibility. Endoscopic ultrasonography and biopsy was performed, but histology would not be available for 1 week. This mass was inoperable as it had invaded the superior mesenteric vessels. The patient had capacity and did not wish to consider palliative chemotherapy or any life-prolonging treatments as his father had had a difficult and prolonged death from metastatic cancer. The man expressed the wish to go home and threatened to self-discharge against medical advice.

How should this patient best be managed?

A Respect the patient's autonomy and allow him to go home with an outpatient appointment to discuss the results
B Refer him to the palliative care team for symptom control and continue intravenous fluids until the biopsy results are back
C Explore his concerns about diagnosis and treatment and suggest a time-limited trial of total parenteral nutrition while results are awaited
D Speak with the patient's family and ask them to persuade him to accept artificial nutrition and palliative chemotherapy
E Refer him to the surgical on-call team to perform a surgical bypass procedure

Question 2

A 76-year-old woman had suffered a catastrophic cerebrovascular accident (CVA) 4 days previously. The chance of any meaningful recovery from this CVA was slim, and she would be fully dependent on others for all her future care needs. She had a reduced Glasgow Coma Scale score and lacked capacity. She had no known next of kin. Nasogastric feeding had been initiated, but she had pulled out three nasogastric tubes in the previous 48 hours.

What would be the most appropriate management of this patient?

A Continue subcutaneous fluids for a further week to see if there is any improvement in her condition
B Refer her to the gastroenterology team for the placement of a percutaneous endoscopic gastrostomy tube (PEG), which she will be unable to pull out
C Consider a 2-week time-limited trial of total parenteral nutrition and reassess the prognosis at this point
D Appoint an Independent Mental Capacity Advocate and consider a time-limited Deprivation of Liberty Safeguard to place mittens on her hands to prevent tube displacement
E Place the patient on end-of-life care

Question 3

A 32-year-old woman with severe learning difficulties and epilepsy was brought into accident and emergency from her nursing home with a displaced percutaneous endoscopic gastrostomy (PEG) tube, which had been in situ for the previous 2 years. The patient is unable to give any history and there was no one with her.

What would be the most appropriate management of this patient?

A Admit under the on-call medical team and start intravenous fluids to prevent dehydration
B Pass a nasogastric tube to administer her anti-epileptic medication and start enteral feeding.
C Immediately pass a new balloon gastrostomy tube into the old tract
D Call the nursing home to establish if the patient has a Lasting Power of Attorney and obtain permission to obtain baseline blood investigations
E Admit the patient and obtain central venous access to start total parenteral nutrition (TPN)