Mediterr J Nutr Metab (2009) 1:203–206
DOI 10.1007/s12349-008-0031-2

POSITION PAPER

Artificial nutrition: technical, scientific and ethical considerations

G. Fatati · M.L. Amerio · M. Bacci · F. Brunetti · A. Caretto · L. Casali · S. Coaccioli · F. D'Andrea · E. Del Toma · M. Di Sapio · D. Domeniconi · M. Kob · F. Leonardi · E. Mirri · P. Nanni · A. Paci · P. Pallini · G. Ronzani · A.R. Sabbatini · S.G. Sukkar · M. Tagliaferri · G. Vincenzoni · M.A. Fusco

Received: 12 November 2008 / Accepted: 23 November 2008 / Published online: 27 January 2009
© Springer-Verlag 2009

Introduction

Artificial nutrition (AN) is a relatively new medical treatment which started in the 1960s with parenteral nutrition (PN) and over the last 20 years has come to include enteral nutrition (EN) in hospitals and homes.

Enormous clinical progress and continual evolution in techniques aimed at rendering organ function substitution more complete and efficient have come to the point where AN can only be suitably performed (indications for therapy, treatment regimen and monitoring) in specialised institutions. However, there has been much discussion about whether AN should be considered medical intervention or an essential intervention of care; in 2004 the Terri Schiavo case became worldwide news and the suspension of AN was decided by the law courts.

This single case served the purpose of helping us to understand that we can no longer ignore the necessity of discussing, on broader terms, the processes leading to medical interventions and how professional deontology can be integrated into these processes.

It has recently been stated that, in the safeguard of health, doctors play a central, unmistakable role as suppliers of a process where the cure is intrinsically bound to the relationship of trust between doctor and patient and this role continues throughout the clinical treatment.

A Code of Ethics, today more than ever, is confirmed as the constitutional charter of rights and duties of the medical profession aimed at protecting citizens. At a time when it has become necessary to proceed from defensive medicine to responsible autonomy, it is important to know the Code of Medical Ethics which is inspired by the pre-eminence of deontology, allowing doctors to be free of, or at least unburdened from, anxiety contingent with professional freedom.

The clinical nutritionist, in carrying out the profession, must try to achieve effective intervention following the scientific guidelines of evidence-based medicine without losing sight of the profession's ethical values. The Code of Ethics must be adhered to in whatever place the profession is carried out, so as to maintain a correct relationship with clients.

Considering that many of its members are involved in AN therapy on a daily basis either in homes or in institutions, ADI believes that the conclusion of the "Ethics in Artificial Nutrition" Conference marks the crucial moment to interpret the new Medical Practitioners' Code of Ethics in the light of clinical intervention to be used in AN.

Therefore, in collaboration with the Professional Board of Physicians of the Province of Terni, a paper has been drawn up that takes into account the scientific, technical and ethical considerations of AN in the light of the relative codes, adding brief comments on the Ethical Code articles considered to be the most important and most suited to AN.

ADI (Italian Association of Dietetics and Clinical Nutrition) and the Professional Board of Physicians of the Province of Terni

Drafted at the end of the "Ethics in Artificial Nutrition" Conference, Terni, 9 May 2007

Paper by ADI and the Professional Board of Physicians of the Province of Terni

Article 32 of the Italian Constitution states:

"The Republic protects health as a fundamental individual right in the interests of the whole society … No one can be forced to undergo any health treatment not required by law. The Law should never violate the limits imposed by respect for human life"

Comment This ratifies the voluntary nature of health treatments and therefore also of AN, in that it is a medical intervention.

Articles of the Medical Code of Ethics

Article 3
… doctors must protect life, physical and mental health and relieve pain so as to respect the freedom and dignity of human life.

Article 4
To carry out their professional duties doctors must adhere to scientific principles and be inspired by the ethical values of the profession, assuming the principle of respect for human life, physical and mental health, and respect for the freedom and dignity of humans; they must not submit to conflicting interests, impositions or suggestions of any kind.

Comment Appropriate use of AN, according to the guidelines of the most highly accredited scientific societies, can only be practised by doctors specialised in Nutritional Sciences or similar. AN treatment requires a high level of competence and when necessary it must be continued in the home, which reduces the overall costs of treatment and considerably improves the patient's quality of life. Therefore an extremely high level of integration must exist between Dietetics and Clinical Nutrition institutions, other hospital departments and home-care institutions in consideration of specific AN requirements and the necessary multidisciplinary interventions. It has to be expected that the organisational standards required by accredited societies for AN providers have to be respected whether interventions are carried out in hospital or at home.

Article 13
The prescription of a treatment … involves the direct professional and ethical responsibility of the doctor … on this supposition the doctor is recognized as having full autonomy to plan, choose and use any type of diagnostic or therapeutic means, even hospitalisation, without prejudice to the patient's freedom to refuse such means assuming the responsibility of the refusal. The prescriptions and treatments must adhere to up to date and experimented scientific principles and take into account an appropriate use of resources.

Comment "Considering that the medicine practice is based on the acquisition of scientific and experimental knowledge continuously evolving, the basic rule to be applied here stems from the autonomy and responsibility of the doctor who, always with the patient's consent, makes the professional choices based on the available knowledge …"

Medical intervention implies respect for the person and professional dignity and these two aspects must be balanced to achieve a proper client–physician relationship. This principle is clearly evinced in Constitutional Court ruling 202 of 2000.

Article 16
The doctor, taking into account the patient's wishes, when expressed, must refrain from diagnostic or therapeutic obstinacy in cases where no health benefit or improvement to the quality of life can be expected for the patient…

Comment AN should be carried out according to the principle of an appropriate level of care, avoiding any form of over treatment.

Article 33
The physician must supply the patient with suitable information on the diagnosis, prognosis, outlook and any possible alternative diagnostic or therapeutic actions and on the predictable consequences of the chosen treatment…

Article 35
The physician must not undertake any diagnostic and/or therapeutic actions without the explicit informed consent of the patient…

In any case, when a documented refusal by a competent individual is relieved, the physician must desist from consequent diagnostic and/or therapeutic actions, as no medical treatment can be given against a person's will…

When dealing with an incompetent patient the physician must use science and conscience to fully respect human dignity and the quality of life, avoiding therapeutic obstinacy and keeping in mind the previous patient wishes…

Comment No AN therapy can be started without the patient's informed consent.

Article 38
The physician must adhere to the freely expressed wishes of the treated person within the setting of autonomy and independence that characterises the profession and he must act fully respecting the person's dignity, freedom and autonomy…

The physician, if the patient is not able to express his/her wishes, must take into account what was previously carefully manifested and documented by the patient…

Comment The validity of these behavioural guidelines is also recognised for AN: "therapeutic practice is at the crossroads between two fundamental rights of the patient: that of being efficiently treated, according to science and medicine canons, and the right to be respected as a person in consideration of his physical and mental integrity …" Use of AN should be rational, scientific, specific and personalised, and overuse should be avoided.

Article 53
When a person voluntarily refuses to eat, the physician is obliged to give information about the serious consequences to health arising from prolonged fasting…

If the person is aware of these possible consequences, the physician must not use coercion or take part in forceful manoeuvres to provide AN, though still providing care.

Comment This reinforces the importance of specific information on AN and a balanced physician–client relationship.

Article 59
Between the attending physician and other medical staff in public or private institutions must exist a relationship of consultation, collaboration and information in order to guarantee diagnostic and therapeutic consistency and continuity, fully respecting the patient's autonomy and privacy and ensuring him correct information…

Comment In order to encourage integration between hospitals and other institutions, and to centrally manage patient health care during the various phases, it is expected that an agreed plan be drawn up regarding the respective tasks and actions.

Indications for home AN, the treatment plan and the follow-up at the nutrition clinic should be decided by the Clinical Nutritionist, in agreement with the general physician, on the basis of the objectives and the clinical situation.

Integration of the responsibilities and available resources in the hospital and district is the essential ingredient allowing the improvement of actions' efficiency and the respect the ethics of a process, or better, the ethics of a course of AN which will lead to the correct implementation of medical treatment.

Conclusions by Aristide Paci, President of the Medical Association for the Province of Terni

AN is a medical treatment of considerable importance which has gradually gained prominence, notwithstanding the considerable difficulties encountered and the limited attention shown by health administrators and, partly, by some members of the medical profession.

On the other hand, a problem of medical pertinence cannot, in my opinion, be subject to legislation but rather, should be self-regulated by the profession due to ethical considerations. It is therefore necessary that physicians and their associations, together with accredited scientific societies, discuss and examine all aspects of the problem to draw up guidelines aimed to achieve the desired objectives.

These guidelines recommend behaviour that will help physicians and patients to make decisions about the most appropriate types of assistance for specific clinical situations.

Hopefully today's conference will be productive; it has been an opportunity to combine the reflections of a prestigious scientific society, ADI, and the professional board of the Physicians of the Province of Terni, which has made ethics a constant matter of meditation, contributing to the definition of the code of ethics recently produced by FNOMCeO (Federation of Medical Associations), including the most recent one approved on 16 December 2006.

AN is a medical intervention. In every medical intervention respect for the person and the dignity of the profession are the equilibrium points in the physician–client relationship.

Comment by Mauro Bacci, Head of Forensic Medicine, Università degli Studi di Perugia e Terni

The fact that AN is considered a therapeutic treatment implies, as was stated in the paper prepared by ADI and the Professional Board of Physicians of the Province of Terni, that its use be provided for with complete respect for the ethical indications, whose value as behaviour guidelines should not be undervalued.

There is no doubt that when AN is not a transient treatment used to overcome "critical" clinical situations, but rather becomes part of the more complex medical

context of "palliative care" or "end of life care" the physician's role is influenced by the complex topics that come into play, such as respect for the patient's wishes and his ability to decide, an ability which can be affected by the underlying disease.

It is in these specific contexts that clinical aspects become entwined with ethical values and it is exactly in these specific contexts that the nutritionist must know how to act.

No medical intervention is free of ethical consequences but in the case of a patient with an incurable disease, and particularly if no longer competent, ethical aspects assume such a significance that sometimes they can emerge as more important than the strictly technical aspects. On the other hand the multiple concerns, even ethical, of pluralistic societies make it difficult to arrive at a common answer to questions concerning the appropriateness or necessity to treat, the jurisdiction or the right of the physician to decide, or the meaning that should be attributed to the previous manifestation of the patient's wishes which, because of his/her condition, cannot be reiterated.

Facing specific questions, the Code of Ethics supplies answers and offers solutions that can guide nutritionists and other physicians.

The ADI paper sheds light on problems arising in nutritional medicine, drawing attention to some articles of the Code of Ethics as a way of reinforcing the value and meaning of the agreed principles of medical ethics, in the absence of which physicians' autonomy could dangerously lead to arbitrary decisions.

From the international literature

Drazen J.M. (2007):

"…In 2005, we all saw the disastrous consequences of congressional interference in the case of Terri Schiavo. In that case, the courts wisely decided that Congress should not be practicing medicine. They correctly ruled that wrenching medical decisions should be made by those closest to the details and subtleties of the case at hand. Such decisions must be made on an individual basis, with the best interests of the patient foremost in the practitioner's mind. It is not that physicians do not want oversight and open discussion of delicate matters but, rather, that we want these discussions to occur among informed and knowledgeable people who are acting in the best interests of a specific patient. Government regulation has no place in this process…"

Conflict of interest statement The authors declare that they have no conflict of interest related to the publication of this paper.

Suggested readings

– (1991) Documento elaborato dalla Commissione ADI istruita per definire le funzioni, le competenze, gli organici e le strutture dei Servizi Dietologici. ADI Notiziario VII:50–51
– (1999) Education for Physicians on End-of-Life Care Trainer's Guide, Module 11, withholding, withdrawing therapy. In: Emanuel LL, von Gunten CJ, Ferris FD (eds) Edication for physicians on end-of-life care/institute for Ethics at the American Medical Association. EPEC Project, The Robert Wood Johnson Foundation, Chcago, IL
– (2000) Commissione SINPE-ADI: Linee guida per l'accreditamento dei Centri di Nutrizione Artificiale Domiciliare. ADI Magazine 4:321–326
– (2002) Position paper of the American Dietetic Association: Ethical and legal issues in nutrition, hydration, and feeding. J Am Diet Assoc 102:716–726
– (2007) Withholding and Withdrawing Life-Prolonging Medical Treatment: Guidance for Decision Making. British Medical Association, Blackwell Publishers
Ackermann RJ, Kemle KA (1999) Death in a nursing home with active medical management. The annali of long-term care 7:313–319
Casarett D, Kapo J, Caplan A (2005) Appropiate use of artificial nutrition and hydratation. Fundamental principles and recommendations. N Engl J Med 353:2607–2123
Cloche MG (2005) Managing conflict at the end of life. N Engl J Med 352:2371–2373
Contaldo F (2006) La nutrizione ai confini della vita. Guida Ed, Napoli
Drazen JM (2007) Government in medicine. N Engl J Med 356:2195
Fatati G (2007) Dietetica e Nutrizione: clinica, terapia e organizzazione. Il Pensiero Scientifico Editore, Rome
Fatati G, Comi D, Lesi C et al (1995) Consensus ADI sul ruolo dei Servizi di Dietologia e Nutrizione Clinica. ADI Ed, Terni
FNOMCeO (2007) Codice di Deontologia Medica. La professione 0:47–71
Hoffer LJ (2006) Tube feeding in advanced dementia: the metabolic perspective. BMJ 333:1214–1215
Lucchin L, Filannino C (1998) Indagine conoscitiva sui Servizi di Dietetica e Nutrizione Clinica. ADI Ed, Terni
Palmo A, Pironi L (2001) Principi clinici e organizzativi delle linee guida per l'accreditamento dei centri di nutrizione artificiale domiciliare. ADI Magazine 1:9–11
Palmo A, Russo R (2003) L'accreditamento professionale delle Strutture di Dietetica e Nutrizione clinica. ADI Ed, Terni
Quill TE (2005) Terri Schiavo – a tragedy compounded. N Engl J Med 352:1630–1633
Sukkar SG, Giacosa L (1995) Home nutritional support in AIDS patients. Clin Nutr 14[Suppl 1]:41–45