La Nutrizione Artificiale Domiciliare : Luci ed Ombre

Dott.ssa Italia Odierna

UOC ANESTESIA E RIANIMAZIONE

CENTRO NAD

OSPEDALE UMBERTO DEA II° LIVELLO
NOCERA INFERIORE

SALERNO

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Clinical Nutrition xxx (2016) 1–38

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Clinical Nutrition

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ESPEN Guideline

ESPEN guidelines on nutrition in cancer patients☆

A "***cancer patient***" is a patient with a cancer diagnosis who is either waiting for or on cancer directed treatment, on symptomatic treatment, and/or receiving palliative care.

Patients cured from their cancer are termed "***cancer survivors***".

"***Pharmaconutrients***" are nutrients supplied in pharmacological doses to modulate immune and metabolic functions and exert effects on clinical outcome.

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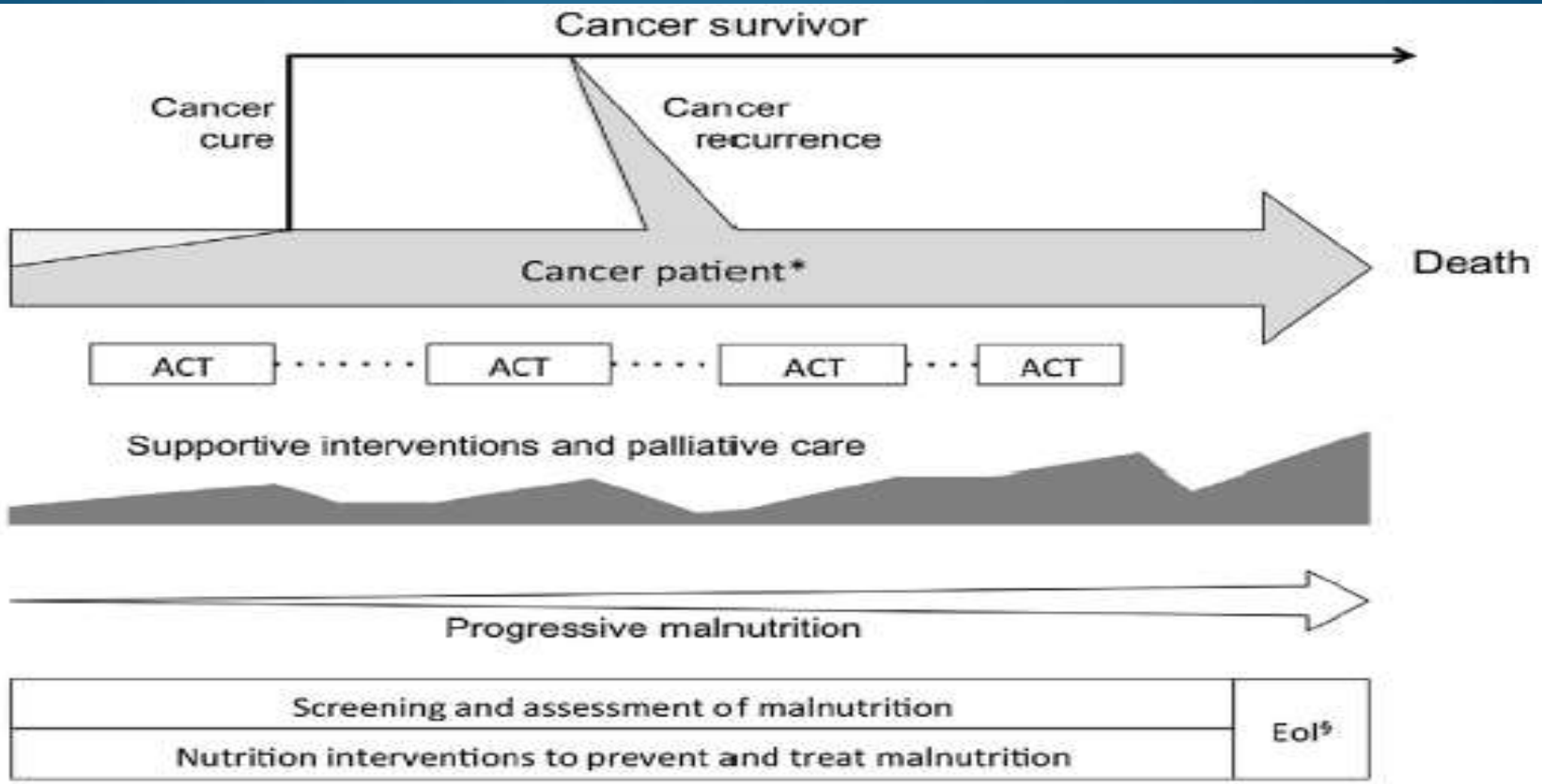

ACT, anti-cancer treatments

*curative setting: palliative setting:

§ End of life, imminent death: symptomatic treatment only

Catabolic alterations in cancer patients

1: Inadequate nutritional intake is observed frequently in patients with cancer and is associated with weight loss, which may be severe.

2: Muscle protein depletion is a hallmark of cancer cachexia, severely impinging quality of life and negatively impacting physical function and treatment tolerance.

3: A systemic inflammation syndrome is frequently activated in patients with cancer.

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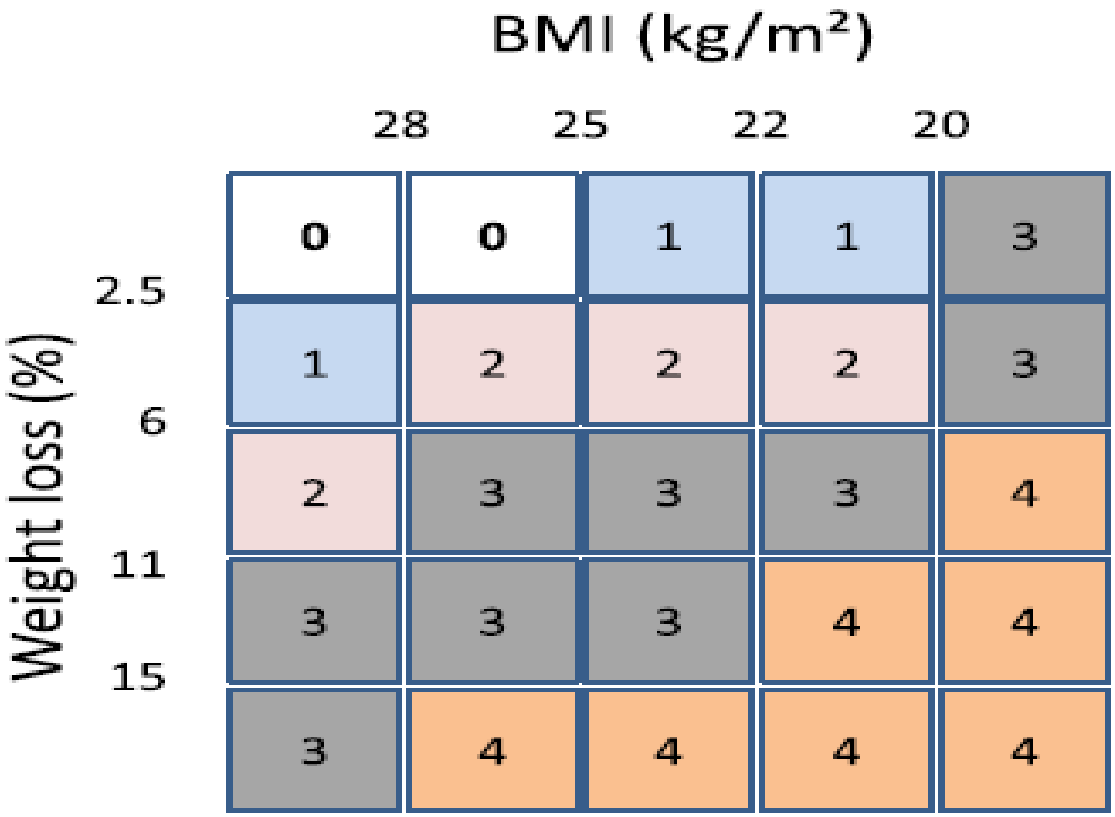

Fig. 2. Grading scheme (grades 0–4) to predict overall survival in patients with advanced cancer. The grading scheme is based on groupings of BMI and weight loss showing distinct median survival (0: best, 4: worst prognosis). ($p < 0.001$; adjusted for age, sex, disease site, stage and performance status). (Adapted from 25).

Martin L, Senesse P, Gioulbasanis I, Antoun S, Bozzetti F, Deans C, et al. Diagnostic criteria for the classification of cancer-associated weight loss. J Clin Oncol 2015;33:90–9.

Clinical Nutrition 36 (2017) 1187–1196

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Review

ESPEN expert group recommendations for action against cancer-related malnutrition

J. Arends [a, b, *], V. Baracos [c], H. Bertz [a, b], F. Bozzetti [d], P.C. Calder [e], N.E.P. Deutz [f], N. Erickson [g], A. Laviano [h], M.P. Lisanti [i], D.N. Lobo [j], D.C. McMillan [k], M. Muscaritoli [h], J. Ockenga [l], M. Pirlich [m], F. Strasser [n], M. de van der Schueren [o, p], A. Van Gossum [q], P. Vaupel [r], A. Weimann [s]

discussions at the Berlin meeting. The expert group emphasized 3 key steps to update nutritional care for people with cancer: (1) screen all patients with cancer for nutritional risk early in the course of their care, regardless of body mass index and weight history; (2) expand nutrition-related assessment practices to include measures of anorexia, body composition, inflammatory biomarkers, resting energy expenditure, and physical function; (3) use multimodal nutritional interventions with individualized plans, including care focused on increasing nutritional intake, lessening inflammation and hypermetabolic stress, and increasing physical activity.

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Disease-related malnutrition has been defined as a condition that results from the activation of systemic inflammation by an underlying disease such as cancer [9]. The inflammatory response causes anorexia and tissue breakdown that can, in turn, result in significant loss of body weight, alterations in body composition, and declining physical function [9].

Cachexia is a multifactorial wasting syndrome characterized by involuntary weight loss with ongoing loss of skeletal muscle mass with or without loss of fat mass; such wasting cannot be reversed by conventional nutrition care and may lead to functional impairment [10–14].

In **precachexia**, early clinical and metabolic signs precede extensive involuntary loss of weight and muscle. Risk for cachexia and its worsening depends on factors such as cancer type and stage, extent of systemic inflammation, and degree of response to anti-cancer therapy [10,13].

Sarcopenia is low lean body mass (mostly musde); fatigue is common, strength may be lessened, and physical function limited [11,13]. As functionality is lost, patients with cancer may no longer be able to live independently, and they often report lower quality of life [8,13].

Sarcopenic obesity is low lean body mass in obese individuals [9]. In such patients, clinicians frequently overlook muscle loss due to the presence of excess fat and extracellular water [12]. In fact, the presence of sarcopenic obesity is an important predictor of adverse outcome, which can be further worsened by surgical interventions

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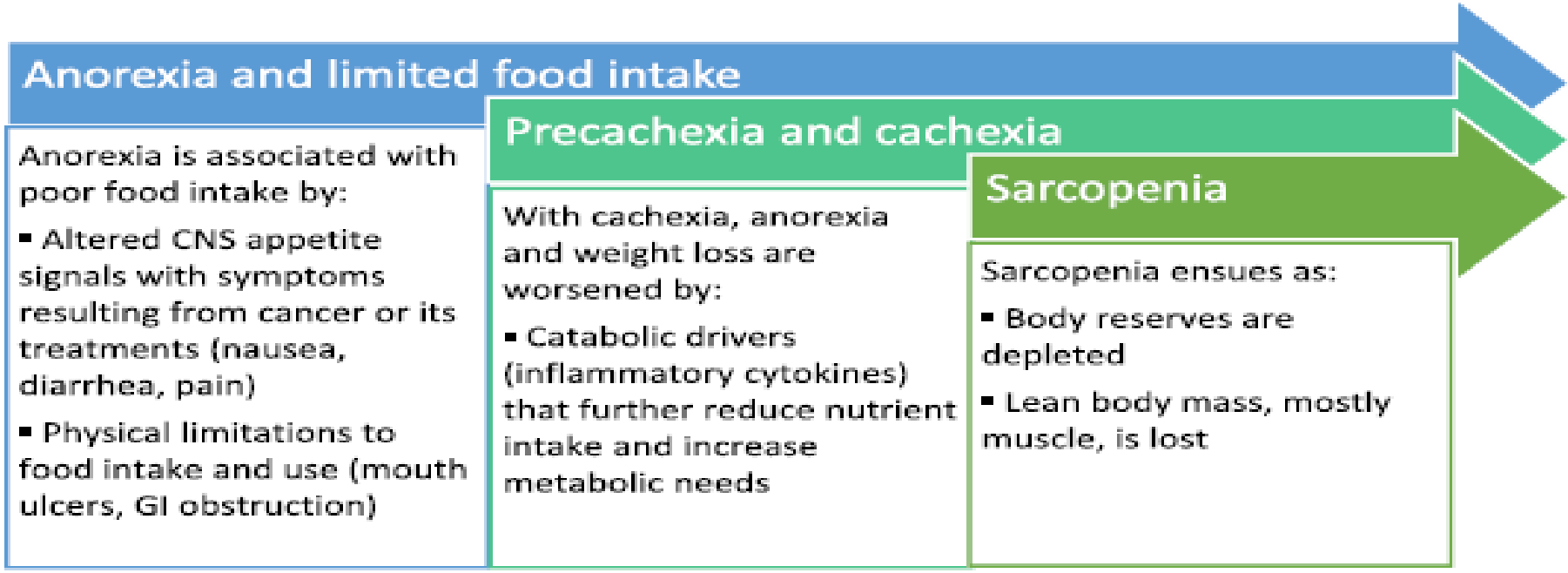

Fig. 1. Malnutrition in patients with cancer: anorexia, cachexia, and sarcopenia. Anorexia, with poor food intake and consequent weight loss, commonly occurs in disease-related malnutrition, especially cancer. These harmful changes are driven by proinflammatory cytokines and tumor-derived factors. The associated conditions of cachexia and sarcopenia may also be present or may develop as cancer advances—cachexia due to inflammation, and sarcopenia due to fatigue and low physical activity and to other causes of declining muscle mass and function. Abbreviations: Central nervous system, CNS; gastrointestinal, GI.

Fearon K, Strasser F, Anker SD, Bosaeus I, Bruera E, Fainsinger RL, et al. Definition and classification of cancer cachexia: an international consensus. Lancet Oncol 2011;12(5):489–95.

ALTA PREVALENZA DI MALNUTRIZIONE IN CANCER PATIENT

Table 1
Reports of malnutrition prevalence in hospitalized patients with cancer.

Study, country	Cancer type	Malnutrition prevalence
Attar et al., 2016 [6] France	Upper gastrointestinal	52% of patients on chemotherapy
Planas et al., 2016 [5] Spain	Multiple types	34% at hospital admission, 36% at discharge
Fukuda et al., 2015 [20] Japan	Gastric	19% of those hospitalized for gastrectomy
Maasberg et al., 2015 [21] Germany	Neuroendocrine	25% at risk or actually malnourished
Silva et al., 2015 [17] Brazil	Multiple types	71%, with 35% moderate and 36% severe
Hebuterne et al., 2014 [4] France	Multiple types	39% overall prevalence, varying by cancer type
Aaldriks et al., 2013 [19] Netherlands	Advanced colorectal	39% in patients >70 years, prior to chemotherapy
Freijer et al., 2013 [18] Netherlands	Multiple types	30% in patients >18 and <60 years old 39% in patients ≥60 years
Pressoir et al., 2010 [1] France	Multiple types	31%, with 12% rated as severely malnourished
Wie et al., 2010 Korea [2]	Multiple	61% of all patients, varying by cancer type and stage

Ryan AM, Power DG, Daly L, Cushen SJ, Ni Bhuachalla E, Prado CM. Cancer-associated malnutrition, cachexia and sarcopenia: the skeleton in the hospital closet 40 years later. Proc Nutr Soc 2016;75(2):199–211.

Freijer K, Tan SS, Koopmanschap MA, Meijers JM, Halfens RJ, Nuijten MJ. The economic costs of disease related malnutrition. Clin Nutr 2013;32(1):136–41.

ELEVATI COSTI SANITARI E FINANZIARI DELLA MALNUTRIZIONE

Table 2
Health and financial impacts of malnutrition in patients with cancer reported in selected publications.

Study, country	Cancer type	Negative impacts of malnutrition
Planas et al., 2016 [5] Spain	Multiple types	Significantly **longer LOS** (>3 days more) and **higher costs of care** (+€2000) for patients with malnutrition risk
Fukuda et al., 2015 [20] Japan	Gastric	Significantly **higher risk of surgical site infections** in malnourished compared to well-nourished patients (36% vs 14%, $P < 0.0001$)
Gellrich et al., 2015 [25] Switzerland	Oral	Malnourished patients had significantly **lower scores on QoL scales** related to physical function
Maasberg et al., 2015 [21] Germany	Neuroendocrine	ished patients
Martin et al., 2015 [22] Canada	Multiple types	Weight-stable patients with BMI ≥25.0 kg/m^2 had the longest survival while **high % weight loss values associated with lowered categories of BMI were related to shortest survival**
Aaldriks et al., 2013 [19] Netherlands	Advanced colorectal	Malnutrition predicted **lower tolerance to chemotherapy** and was associated with greater **risk of mortality**
Freijer et al., 2013 [18] Netherlands	Multiple types	Disease-related malnutrition accounted for an excess €2 billion healthcare spending in a year; 1 of every €7 (about €300 million total) could be attributed to **excess healthcare spending on patients with cancer**
Pressoir et al., 2010 [1] France	Multiple types	Compared with adequately nourished patients, malnourished patients required **more antibiotic treatments** (36% vs 23%, $P < 0.0001$) and had significantly **longer LOS** Severely malnourished patients were at **4-fold higher risk of 2-month mortality** than well-nourished patients

3. High health and financial costs of malnutrition in patients with cancer

Abbreviations: length of stay, LOS; body mass index, BMI; quality of life, QoL.

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New strategies to update nutritional care in cancer

- Screen each patient's nutritional status early in the course of his or her cancer treatment.
- Identify signs or symptoms of anorexia, cachexia, and sarcopenia as early as possible.
- Measure body cell or muscle mass precisely by sensitive imaging technologies (computed tomography and others) for early detection of malnutrition/sarcopenia.
- Use specific biomarkers to assess severity of cancer-related systemic inflammation, e.g. CRP and albumin.
- Use indirect calorimetry to estimate resting energy expenditure (REE) in order to personalize energy and protein needs.
- Use nutrition and metabolic support as a vital part of cancer care; some new strategies show promise for reducing inflammation and restoring lean body mass.
- Assess physical function routinely to monitor and guide physical rehabilitation.

IVYSPRING INTERNATIONAL PUBLISHER

Journal of Cancer
2016; 7(2): 131-135. doi: 10.7150/jca.13818

Review

Nutritional Support in Cancer Patients: A Position Paper from the Italian Society of Medical Oncology (AIOM) and the Italian Society of Artificial Nutrition and Metabolism (SINPE)

Riccardo Caccialanza[1], Paolo Pedrazzoli[2], Emanuele Cereda[1], Cecilia Gavazzi[3], Carmine Pinto[4], Agostino Paccagnella[5], Giordano Domenico Beretta[6], Mariateresa Nardi[7], Alessandro Laviano[8] and Vittorina Zagonel[9]

- Nutritional screening should be performed using validated tools (NRS 2002, MUST, MST, MNA) upon diagnosis and systematically repeated at regular time points in patients with cancer type, stage or treatment potentially affecting nutritional status.

- Patients at nutritional risk should be promptly referred for comprehensive nutritional assessment and support to clinical nutrition services or medical personnel with documented skills in clinical nutrition, specifically for cancer patients.

- Nutritional support should be actively managed and targeted for each patient according to nutritional conditions, clinical status, planned treatment and expected outcome. It should comprise nutritional counseling with the possible use of oral nutritional supplements and/or artificial nutrition (enteral nutrition, total or supplemental parenteral nutrition) according to spontaneous food intake, tolerance and effectiveness.

- Nutritional support and dietary modifications should aim to assist the maintenance or recovery of nutritional status by increasing or preserving protein and calorie intake. "Alternative hypocaloric anti-cancer diets" (e.g. macrobiotic or vegan diets) are not recommended.

- Nutritional support may be integrated into palliative care programs, according to individual-based evaluations, quality of life implications, life expectancy and patients' awareness.

- Home artificial nutrition should be prescribed and regularly monitored using defined protocols shared between oncologists and clinical nutrition specialists.

- Nutritional parameters should be considered as relevant outcomes or potential confounders in outcome assessment in clinical oncology research.

- Well-designed clinical trials are needed to improve the evidence in favour of nutritional support in different care settings for cancer patients.

Mini-Review

Enteral versus parenteral nutrition in cancer patients: evidences and controversies

Ann Palliat Med 2016;5(1):42-49

Paolo Cotogni

Parenteral nutrition (PN)

In cancer patients undergoing chemotherapy, the guidelines (2-4) recommend to initiate EN if oral food intake remains insufficient despite dietary counseling and oral nutritional supplementation, and PN if EN is not sufficient or feasible. Moreover, in patients with chronic insufficient oral food intake and/or uncontrollable malabsorption due to partial obstruction of the gastrointestinal (GI) tract, home AN (HAN) is recommended. Incurable cancer patients may enter a home PN (HPN) program if they are unable to meet their nutritional requirements by oral or enteral route and there is a risk of death due to malnutrition (5).

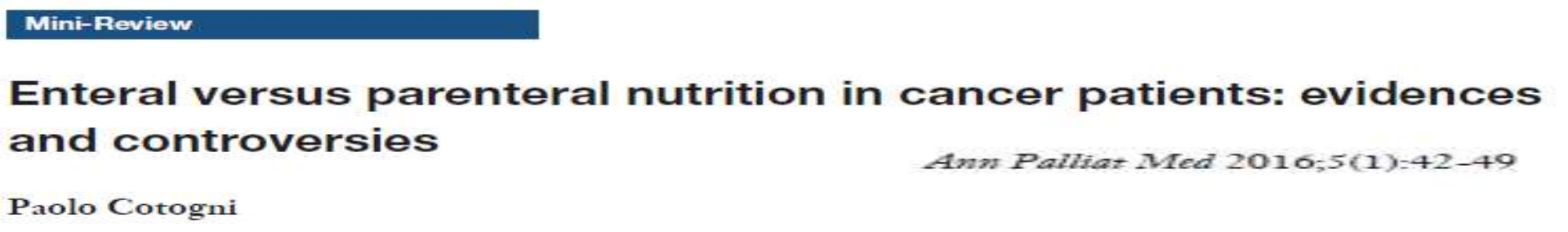
Staun M, Pironi L, Bozzetti F, et al. ESPEN Guidelines on Parenteral Nutrition: home parenteral nutrition (HPN) in adult patients. Clin Nutr 2009;28:467-79.

PN complications

The first rule to avoid PN complications is to prevent them. Complications from PN can be divided into four categories: (I) metabolic; (II) infectious; (III) mechanical; and (IV) psychological. Usually, the metabolic complications can occur acutely, such as hyperglycemia, electrolyte disturbances, and altered hydration status. These complications are rare and easy to manage. Differently, metabolic complications such as metabolic bone disease

PN COMPLICATIONS

- (I) metabolic;
- (II) infectious;
- (III) mechanical;
- (IV) psychological
- Refeeding syndrome ……thiamine supplements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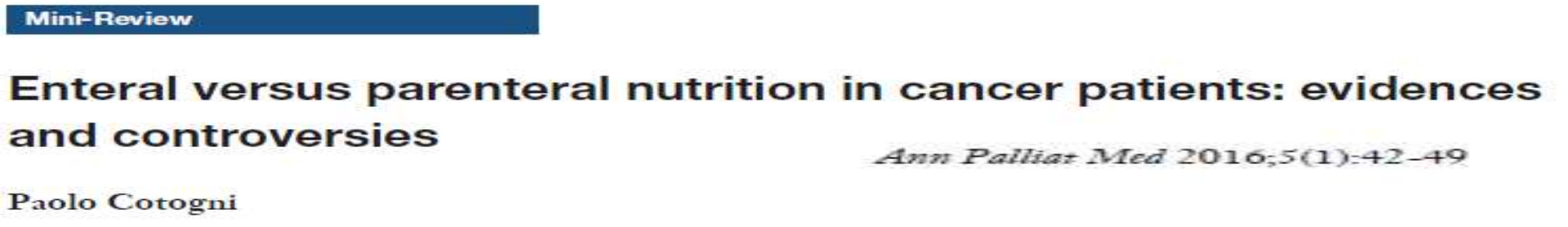
PN COMPLICATIONS

hyperglycemia, hypertriglyceridemia, and hepatic steatosis

- Lipid-related abnormalities occur very rarely in cancer patients on HPN, usually related to liver dysfunctions (i.e., cholestasis) due to the progression of cancer disease in the liver. When a triglyceride level greater than 5 mmol/dL (or >400 mg/dL) is reached, the fat content may be reduced (i.e., opening the bag lipid compartment from 1 to 4 times per week) according to the triglyceride level.



PN COMPLICATIONS

mechanical complications (i.e., catheter dislocation, lumen occlusion, rupture of external tract, and venous thrombosis), as infectious complications, are catheter-related complications (CRCs) and not PN-induced complications.

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Enteral nutrition (EN)

EN is the preferred method of nutritional support when the GI tract is functional and the cancer patient is unable to have an adequate oral intake of nutrients to meet his/her nutritional requirements. The guidelines (3,4,17) recommend that EN may be done using nasogastric tube (NGT) or percutaneous endoscopic gastrostomy (PEG) in radiotherapy—induced severe mucositis or in head–neck/thoracic cancers with obstructive tumor masses. Long-term home EN may be provided, usually through a PEG. About

EN complications

Also EN may cause complications that can be divided into three categories: (I) GI; (II) mechanical; and (III) metabolic. Early satiety, nausea, and vomiting occur in approximately 20% of patients receiving EN due to several causes—usually, the pathogenesis is multifactorial in cancer patient—but delayed gastric emptying is the most common cause. If delayed gastric emptying is suspected, consider the following strategies: (I) reducing the rate of infusion; (II) reducing opioid medications—if it is possible; (III) switching to a low-fat enteral formula; (IV) administering the enteral formula at room temperature; and (V) finally, administering prokinetic and/or antiemetic medications. If the patient

Enteral versus parenteral nutrition

This is so true that, at the beginning of this millennium, Heyland wrote in an editorial there are limited data demonstrating that PN positively impacts clinically-relevant end points in critically ill patients. Moreover, Heyland asserted that studies comparing EN with PN suggest that EN is associated with reduced infectious complications while PN is associated with increased morbidity and mortality in some subgroups of critically ill patients (22). In contrast, Jeejeebhoy, another master of nutrition, in the same years had a completely opposing opinion regarding PN and wrote that the dangers of PN-induced complications have been exaggerated. Further, Jeejeebhoy clearly and concisely defined in his editorial the role of PN writing that 'PN is an equally effective alternative to EN when a risk of malnutrition is present and EN is not tolerated or when gut failure is present' (23).

Klek S. Immunonutrition in cancer patients. Nutrition 2011;27:144-5.

Heyland DK. Parenteral nutrition in the critically-ill patient: more harm than good? Proc Nutr Soc 2000;59:457-66.

Jeejeebhoy KN. Total parenteral nutrition: potion or poison? Am J Clin Nutr 2001;74:160-3.

Enteral versus parenteral nutrition

In 2014, it was published a RCT comparing early NE with early PN in 2,400 critically ill patients. The results were: (I) there were no significant differences between the parenteral and the enteral group in the mean number of treated infectious complications, in rates of 14 other secondary outcomes, or in rates of adverse events; (II) caloric intake was similar in the two groups, with the target intake not achieved in most patients. The conclusions of the authors were: (I) no significant difference in 30-day mortality associated with the route of delivery of early nutritional support in critically ill adults; (II) early nutritional support through the parenteral route, as it is typically administered, is neither more harmful nor more beneficial than such support through the enteral route (24).

Harvey SE, Parrott F, Harrison DA, et al. Trial of the route of early nutritional support in critically ill adults. N Engl J Med 2014;371:1673-84.

Heyland wrote in an editorial there are limited data demonstrating that PN positively impacts clinically-relevant end points in critically ill patients. Moreover, Heyland asserted that studies comparing EN with PN suggest that EN is associated with reduced infectious complications while PN is associated with increased morbidity and mortality in some subgroups of critically ill patients (22). In contrast, Jeejeebhoy, another master of nutrition, in the same years had a completely opposing opinion regarding PN and wrote that the dangers of PN-induced complications have been exaggerated. Further, Jeejeebhoy clearly and concisely defined in his editorial the role of PN writing that 'PN is an equally effective alternative to EN when a risk of malnutrition is present and EN is not tolerated or when gut failure is present' (23).

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Mini-Review

Enteral versus parenteral nutrition in cancer patients: evidences and controversies

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supplemental PN (SPN). Specifically, SPN provides additional amino acids and energy to offset the protein and weight loss experienced from declining food intake. SPN at home provides a median amount of 1,000–1,250 kcal per day, from 3 to 6 times per week. Moreover, there are some advantages of SPN in comparison with total PN: low risk of overfeeding—and therefore of hyperglycemia—overhydratation, and liver dysfunction. Finally, the QoL is improved by a non-daily infusion of HPN.

Mini-Review

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Paolo Cotogni

in cancer patients the GI tract is not always able to tolerate the infusion of the amount of EN formula to meet patients' nutritional requirements due to peritoneal carcinomatosis and/or intra-abdominal recurrences. Moreover, many patients do not tolerate NGT or refuse the placement of PEG and/or jejunostomy. Besides, Orrevall *et al.* showed that nausea, vomiting, and GI obstructions were the most common indications for PN in palliative patients (29). Also, PN should be initiate if adequate EN is not possible in patients with severe radiotherapy-induced mucositis or enteritis and head-neck/esophageal obstructive cancer masses (4).

Orrevall Y, Tishelman C, Permert J, et al. A national observational study of the prevalence and use of enteral tube feeding, parenteral nutrition and intravenous glucose in cancer patients enrolled in specialized palliative care. Nutrients 2013;5:267-82.

Laviano A, Fearon KC. The oncology wall: Could Ali Baba have got to the nutrition treasure without using the correct words? Clin Nutr 2013;32:6-7.

Mini-Review

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A criticism directed at PN is to be over twice the cost of EN. Indeed, evidence clearly demonstrated that both EN and PN are relatively cheap adjuvant therapies—helpful to enhance effectiveness of anticancer therapies—especially if compared to other treatments (30). On the contrary, a prolonged in-hospital length of stay is dramatically more expensive than HPN.

Laviano A, Fearon KC. The oncology wall: Could Ali Baba have got to the nutrition treasure without using the correct words? Clin Nutr 2013;32:6-7.

Finally, the patient perception of the comfort of the feeding method should be the most important determinant in the choice of the route for delivering AN. Scolapio *et al.* (31) reported that when given a choice between PN and EN, 91% cancer patients preferred IV feeding.

Scolapio JS, Picco MF, Tarrosa VB. Enteral versus parenteral nutrition: the patient's preference. JPEN J Parenter Enteral Nutr 2002;26:248-50.

Mini-Review

Enteral versus parenteral nutrition in cancer patients: evidences and controversies

Paolo Cotogni

Table 1 Criteria for withholding artificial nutrition in cancer patients

Patient will
Short estimated life-expectancy (less than 2–3 months)
Karnofsky performance status scale <50 (ECOG 3–4)
Severe organ dysfunction
Symptoms that are not controlled

ECOG, Eastern Cooperative Oncology Group.

Bozzetti F, Cotogni P, Lo Vullo S, et al. Development and validation of a nomogram to predict survival in incurable cachectic cancer patients on home parenteral nutrition. Ann Oncol 2015;26:2335–40.

Mini-Review

Enteral versus parenteral nutrition in cancer patients: evidences and controversies

Paolo Cotogni

Table 2 Criteria for withdrawing artificial nutrition in cancer patients

Short estimated life-expectancy (days)
Uncontrolled or refractory symptoms:
Pain
Vomiting
Dyspnea
Delirium
Progression of major organ failure as reflected by:
Increase of liver tests
Increase of creatinine
Need of oxygen supply
Refractory hypotension
Decrease of performance status scale
Patient will

Prado CM, Sawyer MB, Ghosh S, et al. Central tenet of cancer cachexia therapy: do patients with advanced cancer have exploitable anabolic potential? Am J Clin Nutr 2013;98:1012-9.

Giunta Regionale della Campania

Bollettino Ufficiale della Regione Campania n. 17 del 21 marzo 2005

REGIONE CAMPANIA - Giunta Regionale - Seduta del 16 febbraio 2005 - Deliberazione n. 236 - Area Generale di Coordinamento - n. 19 - Piano Sanitario Regionale N. 20 - Assistenza Sanitaria - **Nutrizione Artificiale Domiciliare - Definizioni di Percorsi Assistenziali.**

- L'U.O. di Nutrizione Clinica e NAD è responsabile della gestione nutrizionale di tutto il percorso diagnostico e terapeutico e collabora con il medico di medicina generale e con il medico coordinatore di distretto
- L'U.O. di Nutrizione Clinica e NAD assicura al paziente la qualità del trattamento terapeutico con uno standard elevato di procedure in relazione alla diversa patologia di NAD e garantisce il monitoraggio periodico e la prevenzione, diagnosi e trattamento delle eventuali complicanze anche in collaborazione con altre strutture sanitarie idonee
- L'U.O. di Nutrizione Clinica e NAD assicura che il paziente riceva in modo puntuale secondo le modalità stabilite dalle leggi i materiali le attrezzature necessarie al trattamento ed inoltre garantisce, in caso di cattivo funzionamento, di provvedere alla tempestiva sostituzione dei materiali d'uso

REGIONE CAMPANIA - Giunta Regionale - Seduta del 19 ottobre 2006 - Deliberazione N. 1643 - Area Generale di Coordinamento N. 20 - Assistenza Sanitaria - **DGRC 236 del 21.3.2005 Nutrizione Artificiale Domiciliare: Definizione di percorsi terapeutici. Integrazione: Tariffario Regionale per la Nutrizione Artificiale Domiciliare.**

Per quanto esposto in narrativa e che qui si intende integralmente riportato

* di approvare il Tariffario Regionale per la Nutrizione Artificiale- Allegato.1 che forma parte integrante della presente deliberazione;

* di autorizzare la compensazione interaziendale per la Nutrizione Artificiale Domiciliare applicando le tariffe specificate nel Tariffario Regionale secondo precise procedure e modalità definite dal competente Settore Programmazione Sanitaria - Allegato 2 che forma parte integrante della presente deliberazione;

* di integrare la rete regionale della Nutrizione Artificiale Domiciliare - Allegato 3 che forma parte integrante della presente deliberazione;

* i Centri NAD devono garantire oltre l'assistenza ambulatoriale anche quella di Day Hospital e/o Ricovero ordinario direttamente o indirettamente collegandosi con il Presidio Ospedaliero di riferimento;

* la Nutrizione Artificiale domiciliare non va identificata con l'ADO Assistenza Domiciliare Ospedaliera con la quale i Centri NAD devono collaborare;

* di incaricare il Settore Farmaceutico con successivi provvedimenti a definire le caratteristiche dei Centri della Nutrizione Artificiale Domiciliare secondo i livelli NAD e le procedure stabiliti dalla DGRC 236 del 16.2.2005 Nutrizione Artificiale Domiciliare;

* di incaricare il Settore Farmaceutico con atto dirigenziale a provvedere all'individuazione e aggiornamento dei responsabili dei Centri della Nutrizione Artificiale come da allegato;

* di inviare ai Settori Farmaceutico, Assistenza Sanitaria e Programmazione Sanitaria per quanto di rispettiva competenza.;

* di autorizzare la pubblicazione sul BURC.

BOLLETTINO UFFICIALE
della REGIONE CAMPANIA

n. 20 del 31 Marzo 2014

PARTE I Atti della Regione

Regione Campania
Commissario ad acta per la prosecuzione del
Piano di rientro del settore sanitario
(Deliberazione Consiglio dei Ministri 23/4/2010)

DECRETO N. 18 DEL 21.03.2014

OGGETTO : ADEGUAMENTO PROGRAMMI OPERATIVI 2013 / 2015 AGLI INDIRIZZI MINISTERIALI

BOLLETTINO UFFICIALE
della REGIONE CAMPANIA

n. 63 del 26 Settembre 2016

PARTE I Atti della Regione

Delibera del Consiglio dei Ministri dell'11/12/2015
per l'attuazione del piano di rientro dei disavanzi
del settore sanitario della Regione Campania
Il Commissario ad Acta
Dr. Joseph Polimeni
Il Sub Commissario ad Acta
Dr. Claudio D'Amario

DECRETO n. 98 del 20.09.2016

OGGETTO: Istituzione della Rete Oncologica Campana.

3. Organizzazione e funzionamento della Rete Oncologica Campana

3.1 Organi costitutivi e generalità di funzionamento della Rete Oncologica Campana (R.O.C.)

3.2.5 Istituzione dei GOM ed attività di monitoraggio aziendale

Le figure professionali fondamentali per la costituzione del GOM sono:

- L'Oncologo Medico
- Il Chirurgo
- Il Radioterapista

In base allo specifico PDTA ed al variare della storia naturale della malattia, prenderanno parte per i loro ambiti di competenza anche altri professionisti che partecipano alla piena realizzazione del Percorso Assistenziale, quali ad esempio:

- Ginecologo
- Infermiere, tra cui infermiere specializzato nella preparazione ed erogazione di chemioterapie antineoplastiche
- Anestesista/Rianimatore, anche con esperienza nella gestione di accessi venosi centrali e periferici
- Medico esperto nella gestione della terapia del dolore

fonte: http://burc.regione.campania.it

- Genetista/Biologo Molecolare/Biotecnologo Genetista con esperienza nel settore oncologico
- Medico di Laboratorio
- Anatomopatologo/Citopatologo
- Farmacista responsabile di servizio U.MA.C.A/U.F.A.
- Radiologo
- Radiologo Interventista
- Medico Nucleare
- Fisiatra
- Nutrizionista
- Psico-oncologo

Tali professionisti possono provenire anche da altre Aziende Sanitarie, IRCCS, Enti e Centri di Ricerca Biotecnologica, Centri di Diagnostica e/o Terapia.

TAKE HOME MESSAGES

REALIZZAZIONE DELLA RETE Nad

Realizzazione della rete oncologica

Individuazione delle Figure e dei ruoli:

Chi fa

Come Fa

Dove fa

GRAZIE PER L'ATTENZIONE

Licosa ,Castellabate (SA