

I PROBLEMI NUTRIZIONALI **DEI PAZIENTI IN TRATTAMENTO CHEMIO-RADIOTERAPICO**

Alessandro Gava Radioterapia Oncologica **Treviso**





SEDE NEOPLASIA

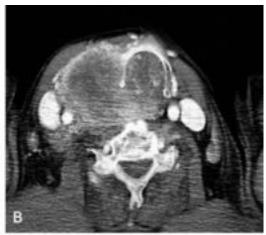




ESTENSIONE NEOPLASIA



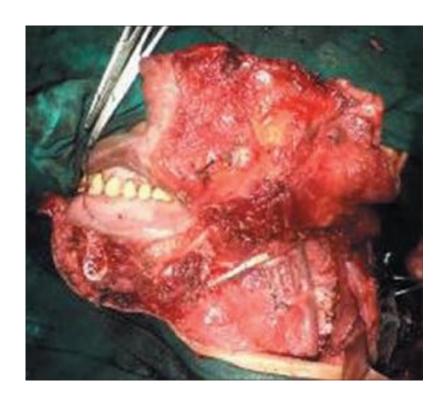






TRATTAMENTO CHIRURGICO







MUCOSITE DA RADIO-CHEMIOTERAPIA









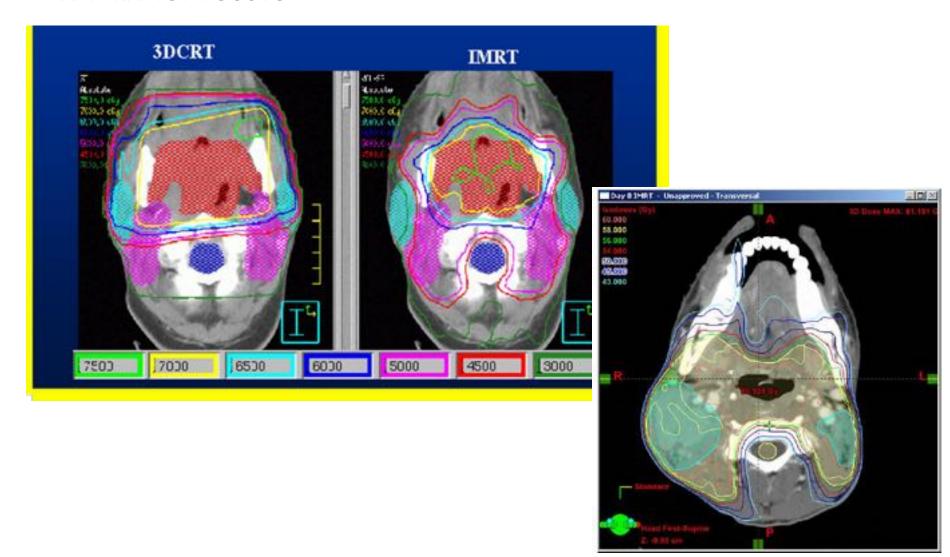
INFEZIONI







ALTERAZIONI GUSTO





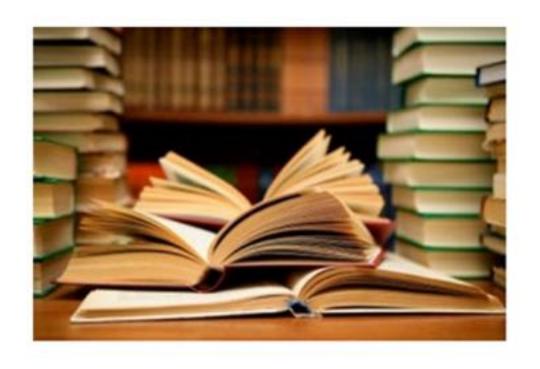
ASTENIA-ANORESSIA



Consenso sulla terapia di supporto nel paziente con neoplasie testa-collo sottoposto a trattamenti integrati chemio-radioterapici

NUTRIZIONE

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Review

Effect of nutritional interventions on nutritional status, quality of life and mortality in patients with head and neck cancer receiving (chemo)radiotherapy: a systematic review**



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SUMMARY

Suckground and aims: We performed a systematic review to examine the effect of nutritional interventions on nutritional status, quality of life (QoL) and mortality in patients with head and neck squamous cell cancer (HNSCC) receiving radiotherapy or chemoradiotherapy.

Methods: We searched Pubmed, EMBASE, CENTRAL and Cinahl from inception through January 3rd, 2012 to identify randomized controlled trials (RCTs) from a broad range of matritional interventions in patients with HNSCC during (chemo)udiothesupy. Two reviewers independently assessed study eligibility and risk of bias, and extracted data.

Results: Of TMT titles identified, 12 study reports were finally included, describing 10 different studies with 11 interventions, Four out of 10 studies examined the effects of individualized distary counseling, and showed significant benefits on nutritional status and QOL compared to no counseling or general nutritional advice by a nurse (p < 0.05). Three studies on oral nutritional supplements (ONS) were inconsistent about the effect on nutritional status compared with no supplementation. One study showed that nasogaotric tube feeding had beneficial effects on nutritional status compared to ONS, but not in all patient groups (p < 0.04). One study showed benefits of percutaneous endoscopic gastronomy (PEC) feeding on nutritional status shortly after RT compared with nasogastric feeding (p = 0.001). Two studies showed that prophylactic PEG feeding was not superior over tube feeding if required.

Conclusions: This review shows beneficial effects of individualized dietary counseling on nutritional status and QoL, compared to no counseling or standard nutritional advice. Effects of ONS and tube feeding were inconsistent.

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SUMMARY

Background and aims: We performed a systematic review to examine the effect of nutritional interventions on nutritional status, quality of life (QoL) and mortality in patients with head and neck squamous cell cancer (HNSCC) receiving radiotherapy or chemoradiotherapy.

Methods: We searched Pubmed, EMBASE, CENTRAL and Cinahl from inception through January 3rd, 2012 to identify randomized controlled trials (RCIs) from a broad range of nutritional interventions in patients with HNSCC during (chemo)radiotherapy. Two reviewers independently assessed study eligibility and risk of bias, and extracted data.

Results: Of 1141 titles identified, 12 study reports were finally included, describing 10 different studies with 11 interventions. Four out of 10 studies examined the effects of individualized dietary counseling, and showed significant benefits on nutritional status and QOL compared to no counseling or general nutritional advice by a nurse (p < 0.05). Three studies on oral nutritional supplements (ONS) were inconsistent about the effect on nutritional status compared with no supplementation. One study showed that nasogastric tube feeding had beneficial effects on nutritional status compared to ONS, but not in all patient groups (p < 0.04). One study showed benefits of percutaneous endoscopic gastronomy (PEG) feeding on nutritional status shortly after RT compared with nasogastric feeding (p = 0.001). Two studies showed that prophylactic PEG feeding was not superior over tube feeding if required.

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Pubmed, EMBASE, Cochrane. Randomized trials of nutritional interventions in patients with NNSCC during (chemo)radiotherapy.

1141 titles

10 study:

- 4 showed significant benefit of individualized dietary columnseling on nutritional status and QOL.
- 3 showed that the oral nutrition supplements (ONS) where inconsistent on nutritional status compared with no supplementation.
- 1 study showed that NGS had beneficial effects on nutritional status compared to ONS.
- 1 study showed benefit of PEG on nutritional status shortly after RT compared with NGS.
- •2 studies showed that prophyllactic PEG was not superior over tube feeding if required.

Conclusions: This review shows beneficial effects of individualized dietary counseling on nutritional status and QoL, compared to no counseling or standard nutritional advice. Effects of ONS and tube feeding were inconsistent.

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GENERAL STATEMENTS

Malnutrition in head and neck cancer patients can have a significant adverse impact on clinical, cost and patient centred outcomes such as treatment toxicity, treatment interruptions, unplanned hospital admissions, length of stay and quality of life.

Before the start of radiotherapy or chemo-radiotherapy 25-57% of this patient group are malnourished; during radiotherapy or chemo-radiotherapy the percentage of malnourished patients can rise to 44-88% in relation to the extent of cancer and the intensity of care

Nutrition intervention aims to maintain/prevent a decline/improve nutritional status and associated outcomes in adults with malnutrition or at risk of malnutrition.

Nutrition intervention improves patients-centred outcomes (quality of life, physical function and patients satisfaction).



RISK FACTORS

Dysphagia

Recent unintentional weight loss

Altered inflammatory index(C-RP)



PRE-TREATMENT / TREATMENT

A validated nutrition screening tool should be used for identifying malnutrition risk in cancer patients (NRS-2002, MNA, MST, MUST).

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Nutrition assessment should be based on clinical anthropometric and biochemical parameters. Moderate-severe malnutrition is defined as the presence of unintentional weight loss i.e. 5% weight loss over prior 1 month or > 10% in over 6 months.

Patient-Generated Subjective Global Assessment (PG-SGA) is also recommended to be used .



PRE-TREATMENT / TREATMENT

Malnutrition screening should be undertaken on all patients at diagnosis to identify those at nutritional risk and then repeated at intervals through each stage of treatment. If identified at high risk, patients should be referred to the dietician for nutrition evaluation and early nutrition intervention.

All patients candidate to chemo-radiation should be referred to the dietician for evaluation and monitoring of nutritional status and early nutrition intervention with nutritional counselling. Weight, food and liquid intake should be monitored regularly to determine whether their energy and fluid requirements are being met.

PRE-TREATMENT / TREATMENT

Oral function may be affected by pre-existing oral and dental disease.

Patient at risk of dysphagia, needs evaluating also by deglutologist

Dietary counselling and/or supplements are effective methods of early nutrition intervention, and should be started at the beginning of oncologic treatment; weekly dietician contact improves outcomes in patients receiving chemo-radiotherapy and it is suggested as counselling schedule.



TREATMENT

Prophylactic tube feeding should be considered before starting any treatment in:

patients with severe weight loss prior to treatment, i.e. 5% weight loss over prior 1 month, or 10% weight loss over 6 months;

patients with ongoing dehydration or dysphagia, anorexia, or pain interfering with the ability to eat/drink adequately that can not be corrected with short-term intervention;

patients with significant comorbidities that may be aggravated by poor tolerance of dehydration, lack of caloric intake; including oral/dental disease:

patients with documented aspiration;

patients for whom long-term swallowing disorders are likely (see for suggestions the total score proposed e.g. by Langendijk et al.).



TREATMENT

If the caloric intake is not adequate according to recommended daily allowance, a hyper-calorie and high-protein nutritional supplement with vitamins and minerals may be recommended. It's advisable that this supplement is available in a wide range of tastes and textures.

Nutrition prescription aims for energy and protein intakes of at least 30 Kcal/Kg/day and 1,2 g protein/Kg/die.



TREATMENT

In patients with a food intake <50% for more than five days despite nutrition counselling, enteral tube feeding (Nasogastric tube or Percutaneous Endoscopic Gastrostomy) should be used to help minimize weight loss and dehydration.







TREATMENT

Optimal method of tube feeding (nasogastric versus prophylactic or non prophylactic gastrostomy) remains unclear; however, if tube feeding is planned for more than 30 days, gastrostomy is indicated.

The parenteral nutrition should be used only if the bowel is not working or there are serious contraindications to the placement of a device for enteral nutrition.

If enteral nutrition is adopted, patients should be encouraged to continue to swallow and to wean from artificial nutrition as quickly and safely as is feasible, regardless of the method (e.g. nasogastric tube, percutaneous gastrostomy, and parenteral nutrition).







CTCAE definition:

a disorder characterized by excessive loss of water from the body. It is usually caused by severe diarrhea, vomiting or diaphoresis





GENERAL STATEMENTS



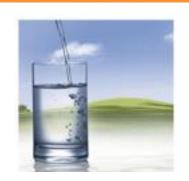
Fluid deficit (FD) is loss of water with or without accompanied electrolytes, particularly sodium. Volume depletion occurs from extracellular fluid loss (especially intravascular) accompanied by a normal, decreased, or increased plasma sodium level. Dehydration is total body water deficit, predominantly intracellular.

Dehydration is always hypernatremic.

Fluid deficit is not a disease entity but points to an underlying disorder. It may develop at any stage of cancer, and multiple mechanisms are responsible. Deficit may result as a physiological or metabolic effects of cancer or its treatment.



GENERAL STATEMENTS



Poor oral fluid intake is present in 78% of cancer patients.

The assessment and treatment of Fluid Deficit (FD) is paramount in patients undergoing oncologic treatments.

The most frequent causes of FD to be evaluated in particular in head and neck cancer patients are:

Anorexia - Early satiety - Vomiting - Diarrhoea - Bleeding - Fever - Infections - Swallowing problems - Diuresis from hypercalcemia - Glycosuria - Diabetes insipidus - Diuretic phase of acute renal failure - Unsupervised medication use (diuretics and laxatives)





TREATMENT



In absence of enteral tube, when the oral intake of water is difficult, intravenous fluids intake is necessary, in particular in presence of:

- Vomiting
- Fatigue
- Diarrhoea
- Confusion
- Delirium
- Fainting
- Syncope
- Anorexia
- Glycosuria
- Metabolic alterations
- Renal failure
- Nephrotoxicity
- Administration of chemotherapy such as Cisplatinum

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Malnutrition (Weight loss MEdDRA code 10047900)

• Definition CTCAE definition:

Weight loss > 5%