3. Evaluation de l'état nutritionnel

Elle doit être intégrée au dispositif d'annonce et des informations nutritionnelles adaptées à la pathologie du patient doivent être fournies au patient.

Cette évaluation peut comprendre (109,110) :

- Dépistage de l'état nutritionel lors du diagnostic avec notamment poids actuel et perte pondérale, calcul de l'IMC.
- Identification rapide des signes et symptomes d'anorexie, de cachexie et de sarcopénie. La détermination de la masse musculaire par un bilan d'imagerie (exemple : scanner) pour identifier précocement la malnutrition/sarcopénie pourrait être utile.
- Utilisation de biomarqueurs spécifiques pour évaluer l'état inflammatoire lié au cancer (CRP, albumine).
- Utilisation de la calorimétrie indirecte pour estimer la dépense énergétique au repos afin de personnaliser les besoins en énergie et protéines.
- Mesure de la circonférence musculaire brachiale (CMB) en cas de 3ème secteur.
- Evaluation systématique des ingesta :
  - Par échelle visuelle ou verbale analogique (EVA).
  - Par une consultation diététique avec évaluation de la prise alimentaire sur 2 à 7 jours.
  - En cas d'utilisation de score multidimensionnel de dépistage pour évaluer le statut nutritionnel, il est recommandé d'utiliser le *subjective global assessment* (SGA) (111) ou le *patient generated subjective global assessment* (PG-SGA) (112) ou le *mini nutritional assessmen*t (MNA)[M] pour les patients de gériatrie.

4. Prise en charge nutritionnelle en contexte chirurgical

4.1. Évaluation du grade nutritionnel

Le risque nutritionnel peut être classé en trois catégories (cf. **Tableau 25**) (113).

Grade Nutritionnel 2 (GN 2)	Patient non dénutri
Grade Nutritionnel 3 (GN 3)	Patient dénutri et chirurgie sans risque élevé de morbidité
Grade Nutritionnel 4 (GN 4)	Patient dénutri et chirurgie à risque élevé de morbidité*

**La chirurgie thoracique (résection pulmonaire majeure) est considérée comme un acte à risque élevé de morbidité*

Tableau 25 – Stratification du risque nutritionnel

4.2. Nutrition pré-opératoire

Tout patient GN 2 ou 3 **doit probablement** bénéficier d'une prise en charge nutritionnelle pré-opératoire :

- Patients GN 2 : conseils diététiques et compléments nutritionnels.
- Patients GN 3 : compléments nutritionnels, nutrition entérale ou parentérale.

Tout patient GN 4 **doit** recevoir une assistance nutritionnelle pré-opératoire : nutrition entérale ou nutrition parentérale d'au moins 7 à 10 jours.

Chez la personne âgée, les stratégies nutritionnelles pré-opératoires sont les mêmes que chez le sujet plus jeune.

[M] Accessible sur: www.mna-elderly.com/forms/MNA_english.pdf

4.3. Nutrition dans la période post-opératoire

Il est recommandé de reprendre le plus rapidement possible, au cours des 24 premières heures post-opératoires, une alimentation orale, selon la tolérance du patient, sauf contre-indication chirurgicale.

- Chez les patients non dénutris (GN 2) :
  Si une assistance nutritionnelle post-opératoire est proposée, elle ne doit pas être inférieure à 7 jours.

Il **est recommandé** d'instaurer une assistance nutritionnelle quand le patient a des apports alimentaires post-opératoires inférieurs à 60% de ses besoins quotidiens depuis 7 jours.

- Chez les patients dénutris (GN 3 et 4) : Il faut instaurer, dès les 24 premières heures post-opératoires, un support nutritionnel.
  En chirurgie programmée non compliquée, il n'est probablement pas recommandé de prescrire systématiquement de la glutamine en péri-opératoire. Par contre, en cas de complications post-opératoires majeures, il est recommandé de prescrire de la glutamine par voie intraveineuse (en cas de nutrition parentérale exclusive), à forte dose (0,2 à 0,4 g/kg par jour soit 0,3 à 0,6 g/kg par jour de glutamine sous forme de dipeptide) (114).(Recommandations de bonnes pratiques cliniques sur la nutrition péri-opératoire. Actualisation 2010 de la conférence de consensus de 1994 sur la « Nutrition artificielle péri-opératoire en chirurgie programmée de l'adulte »).

Recommandations

- Les patients non dénutris (GN2) doivent probablement bénéficier d'une prise en charge nutritionnelle par conseils diététiques et compléments nutritionnels en pré-opératoire. Une assistance nutritionnelle post-opératoire d'une durée inférieure à 7 jours n'est pas recommandée. Il est recommandé d'instaurer une assistance nutritionnelle quand le patient a des apports alimentaires post-opératoires inférieurs à 60% de ses besoins quotidiens depuis 7 jours.
- Les patients dénutris et devant subir une chirurgie sans risque élevé de morbidité doivent probablement bénéficier de compléments nutritionnels, nutrition entérale ou parentérale (GN 3) en période pré-opératoire.
- Tout patient dénutri et devant subir une chirurgie avec risque élevé de morbidité (GN 4) doit recevoir une assistance nutritionnelle pré-opératoire (nutrition entérale ou nutrition parentérale) d'au moins 7 à 10 jours.
- Chez les patients dénutris (GN 3 et 4) il est recommandé d'instaurer dès les 24 premières heures post-opératoires, un support nutritionnel.

5. Prise en charge nutritionnelle en contexte de radiothérapie ou radio-chimiothérapie concomitante

En l'absence de dénutrition ou de toxicité œsophagienne limitant les apports nutritionnels par voie orale, une nutrition artificielle systématique n'est pas recommandée lors d'une radiothérapie thoracique (115).

6. Prise en charge nutritionnelle en contexte de chimiothérapie

Il est recommandé un conseil diététique personnalisé, intégrant, si nécessaire, la prescription de compléments nutritionnels oraux en cas de dénutrition et/ou de diminution des ingesta et/ou à la demande du patient ou de la famille.

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DECLARATION DES LIENS D'INTERETS

Les personnes ci-dessous ont déclaré des liens d'intérêt en oncologie thoracique pour des participations à des congrès, séminaires ou formations ; des bourses ou autre financement ; des rémunérations personnelles ; des intéressements ; ou tout autre lien pertinent dans les 3 dernières années :

ARPIN D : Takeda, Roche
AUDIGIER-VALETTE C : Roche, Abbvie, BMS, MSD, Takeda, Boehringer, AstraZeneca, Pfizer, Novartis, Fabre, Amgen, Lilly
AVRILLON V : BMS, Abbvie.
BARANZELLI A. : Roche, Takeda, BMS, MSD
BAUD M. : Boehringer
BAYCE BLEUEZ S. : Roche, BMS, AMGEN
BERARD H : Roche, Pfizer, Boehringer
BERNARDI M. : BMS, Sandoz, Roche
BOMBARON P : Roche, AstraZeneca, BMS, Boehringer.
COURAUD S. : AstraZeneca, Boehringer Ingelheim, Lilly, Merck, MSD, Novartis, Pfizer, Roche, Sysmex Innostics, Chugai, Laidet.
DELCLAUX B : BMS, Boehringer, AstraZeneca, Novartis, Roche.
DEMIR S : Pfizer, BMS
FALCHERO L. : Roche, Boehringer, AstraZeneca, BMS, Pfizer, Amgen.
FOUCHER P : AstraZeneca, Roche, BMS, MSD, Chugai, Vifor, IFCT, PFIZER
FOURNEL P. : Lilly, Amgen, BMS, MSD, Roche, Pfizer, Astelas, Boehringer, AstraZeneca, Takeda, Novartis, PFO
GERINIERE L : Lilly
GIAJ LEVRA M. : MSD, BMS, Roche, AstraZeneca, Novartis, Pfizer, Boehringer
GONZALEZ G. : Roche, Novartis, Pharmadom
GOUNANT V : Takeda, Lilly, Roche, AstraZeneca, BMS, Boehringer, Pfizer, Novartis.
GROUET A. : Boehringer, Novartis
HAMMOU Y : Chiesi, ISIS, Elia
JACOULET P : Boehringer
JANICOT H. Boehringer
LARIVE S. : TEVA Santé, Pfizer, Boehringer, BMS, MSD, AstraZeneca.
LE TREUT J. : AstraZeneca, Boehringer, Roche, BMS, MSD
LOCATELLI SANCHEZ M. : Boehringer, BMS, AstraZeneca, LFB
LUCIANI S : Pfizer
MARTIN E. : Astra Zeneca
MASTROIANNI B : Amgen
MERLE P : MSD, AstraZeneca, BMS, Pfizer
MORO-SIBILOT D : Roche, Pfizer, Lilly, Boehringer, MSD, BMS, Takeda, AstraZeneca, Novartis, Amgen, Abbvie
NAKAD A : BMS
ODIER L. : Lilly, Amgen, Pfizer
PAULUS V : MSD, Roche
PEROL M. : Roche, AstraZeneca, Boehringer, Lilly, Takeda, BMS, MSD, Pfizer, Novartis, Chugai
PERROT E. : AstraZeneca
PINSOLLE J. : Takeda, MSD, Roche, Pfizer, Agiradom.
RANCHON F : CELGENE, JAZZPHORNA
SAKHRI L : Pfizer, BMS.
SOUQUET P.-J. : Amgen, AstraZeneca, BI, CHUGAI, P FABRE, LILLY, MSD, BMS, Pfizer, Novartis, Sandoz, Roche, Takeda, Bayer, Merrimack, Merck, Astellas,
TAVIOT B : Chiesi
TISSOT C : Amgen, Sandoz, BMS
WATKIN E. : MSD, AstraZeneca, Boehringer, Pfizer, Roche, BMS
ZALCMAN G. : Roche, AstraZeneca, BMS, Pfizer, Novartis, Abbvie, MSD, Boehringer, GSK, Inventiva

Les autres participants et membres des groupes de travail n'ont déclaré aucun lien d'intérêt en oncologie thoracique.
Aucun participant ou membre d'un groupe de travail n'a rapporté de lien d'intérêt avec l'industrie du tabac.

MENTIONS LEGALES

La réunion de mise à jour des référentiels (édition 2019) a été organisée par l'Association de Recherche d'Information Scientifique et Thérapeutique en Oncologie Thoracique (ARISTOT).
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