

To be malnourished or not to be malnourished: that is the question!

To the Editor:

Copyright ©The authors 2022. For reproduction rights and permissions contact permissions@ersnet.org

Received: 10 Sept 2021 Accepted: 28 Sept 2021 In the European Respiratory Journal, MAITRE et al. [1] analysed 17 290 cases of chronic pulmonary aspergillosis (CPA) retrieved between 2009 and 2018 in the French nationwide administrative hospital database (PMSI). They demonstrated high rates of mortality, which was almost one third at 1 year. In multivariate analysis, they showed that mortality was increased in patients with malnutrition with the highest hazard ratio: 2.49, 95% confidence interval 2.05–3.04. Malnutrition, present in 33.4% of patients, was extracted from the database using the ICD-10 code. This implies that the malnutrition diagnosis should have been overtly diagnosed and collected in patients' charts or discharge reports. Because the study used the national health database it was not possible for the authors to report on which criteria was diagnosed malnutrition. We could speculate that body mass index (BMI) below 21 kg·m⁻² was probably the main criteria used, since it is the commonest diagnostic tool and the cut-off value for chronic respiratory diseases such as COPD [2]. The mean BMI has been recently shown as even below this threshold (20.8±4.9 kg·m⁻²) in a recent cohort of CPA patients [3]. As it is well known that malnutrition is highly underdiagnosed at hospital as well as in the community setting [4], we could speculate that the prevalence of malnutrition could have been even higher than 33.4% if a systematic and multimodal assessment of malnutrition was performed. In 2019, new international guidelines for malnutrition diagnosis have been published by the Global Leadership Initiative on Malnutrition (GLIM) [5] to increase the screening and the treatment of malnutrition all over the world. The GLIM guidelines recommend assessing nutritional status by integrating five criteria: BMI, weight loss, loss of muscle mass (by bioimpedance analysis for example) or function, and reduced food intake, using semi-quantitative tools, or the presence of an inflammatory disease such as CPA. Undoubtedly, the use of a full assessment of malnutrition could have identified more malnourished patients and may have strengthened the relation between malnutrition and mortality. Therefore, based on the latter and the report of MAITRE et al. [1], and as we proposed in idiopathic pulmonary fibrosis patients [6], the respiratory care community should propose a more systematic and integrative screening of malnutrition in all patients with chronic respiratory diseases [7]. It is needed to better understand the relation between malnutrition and clinical outcomes, and optimise patient's care. It could be as simple as assessing weight and height at the first visit, in order to calculate BMI, assessing food intake (for example, by using the Simple Evaluation of Food Intake (SEFI®) which is a 10-point visual analogue scale) [8], measuring weight and calculating weight loss at each visit. By improving the awareness of health caregivers and stakeholders towards malnutrition, we would improve patients' quality of life and clinical outcomes as shown in COPD patients [9, 10].



Shareable abstract (@ERSpublications)

Physicians in charge of patients with chronic respiratory diseases, including chronic pulmonary aspergillosis, should be aware of the high prevalence of malnutrition. Despite simple diagnosis, it is underdiagnosed and associated with worse prognosis. https://bit.ly/3uEgEJn

Cite this article as: Jouneau S, Kerjouan M, Thibault R. To be malnourished or not to be malnourished: that is the question! Eur Respir J 2022; 59: 2102455 [DOI: 10.1183/13993003.02455-2021].

Stéphane Jouneau 6,2, Mallorie Kerjouan and Ronan Thibault

¹Dept of Respiratory Medicine, Pontchaillou Hospital, Rennes 1 University, Rennes, France. ²IRSET UMR1085, Rennes 1 University, Rennes, France. ³INSERM, INRAE, Univ Rennes, Nutrition Metabolisms and Cancer, NuMeCan, Nutrition unit, CHU Rennes, Rennes, France.

Corresponding author: Stéphane Jouneau (stephane.jouneau@chu-rennes.fr)

Conflict of interest: S. Jouneau reports fees, funding, or reimbursement for national and international conferences, boards, expert or opinion groups, and research projects over the past 5 years from Actelion, AIRB, AstraZeneca, Bellerophon Therapeutics, Biogen, BMS, Boehringer Ingelheim, Chiesi, FibroGen, Galecto Biotech, Genzyme, Gilead, GlaxoSmithKline, LVL, Mundipharma, Novartis, Pharm-Olam, Pfizer, Pliant Therapeutics, F. Hoffmann-La Roche, Ltd, Sanofi and Savara-Serendex, outside the submitted work. M. Kerjouan has nothing to disclose. R. Thibault has received royalties for designing the Simple Evaluation of Food Intake (SEFI) (Knoë, le Kremlin Bicêtre, France) tool, and consulting fees from F. Hoffmann-La Roche, Ltd.

References

- Maitre T, Cottenet J, Godet C, et al. Chronic pulmonary aspergillosis: prevalence, favouring pulmonary diseases and prognosis. Eur Respir J 2021; 58: 2003345.
- 2 Schols AM, Broekhuizen R, Weling-Scheepers CA, et al. Body composition and mortality in chronic obstructive pulmonary disease. Am J Clin Nutr 2005; 82: 53–59.
- 3 Godet C, Laurent F, Bergeron A, et al. CT imaging assessment of response to treatment in chronic pulmonary aspergillosis. Chest 2016; 150: 139–147.
- 4 Kondrup J, Allison SP, Elia M, et al. ESPEN guidelines for nutrition screening 2002. Clin Nutr 2003; 22: 415–421.
- 5 Cederholm T, Jensen GL, Correia M, et al. GLIM criteria for the diagnosis of malnutrition A consensus report from the global clinical nutrition community. Clin Nutr 2019; 38: 1–9.
- 6 Jouneau S, Kerjouan M, Rousseau C, et al. What are the best indicators to assess malnutrition in idiopathic pulmonary fibrosis patients? A cross-sectional study in a referral center. *Nutrition* 2019; 62: 115–121.
- 7 Jouneau S, Lederlin M, Vernhet L, et al. Malnutrition in idiopathic pulmonary fibrosis: the great forgotten comorbidity! Eur Respir J 2019; 53: 1900418.
- 8 Bouette G, Esvan M, Apel K, et al. A visual analogue scale for food intake as a screening test for malnutrition in the primary care setting: prospective non-interventional study. Clin Nutr 2021; 40: 174–180.
- 9 Collins PF, Elia M, Stratton RJ. Nutritional support and functional capacity in chronic obstructive pulmonary disease: a systematic review and meta-analysis. *Respirology* 2013; 18: 616–629.
- 10 Pison CM, Cano NJ, Cherion C, et al. Multimodal nutritional rehabilitation improves clinical outcomes of malnourished patients with chronic respiratory failure: a randomised controlled trial. Thorax 2011; 66: 953–960.