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EDITORIAL

Why should we all be concerned about sarcopenia and disease-related malnutrition?☆

¿Por qué a todos nos debería preocupar la sarcopenia y la desnutrición relacionada con la enfermedad?

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Nutritional screening in healthcare is a need that cannot be avoided; it is hardly novel, yet it remains an outstanding issue.[1] In recent years, disease-related malnutrition (DRM) has been revealed to be overly common in Spanish hospitals, with prevalences on admission of 23.7% in the PREDYCES Spanish national multicentre study[2] and, more recently, 29.7% in the SEDRENO study.[3] Regardless of the method of detection used, all recent studies have consistently reported similar DRM prevalences in Spain;[4–6] one in every three to four patients admitted to Spanish hospitals can be said to be at risk of DRM. The data from the PREDYCES study and all other studies referenced have also consistently indicated that, for patients, DRM represents higher odds of prolonged hospital stays, readmission and death. Furthermore, DRM is expensive, with excess hospital expenses of up to 35%;[4] if the data from the PREDYCES study are extrapolated to the Sistema Nacional de Salud [Spanish National Health System], it accounts for expenses totalling €1.143 billion per year, the equivalent of 1.8% of the health budget in 2009.[1,7] Despite all these data, advances in the approach to DRM in the 10 years that have elapsed since the PREDYCES study was published have been much slower and more tortuous than would be desirable.

Attention must be drawn to what DRM means for older patients and patients with multiple diseases in particular. Regarding patients over 70 years of age, who are becoming ever more numerous in our society, rates of DRM increase even more; these rates were as high as 34.8% in SEDRENO[3] and 37% in PREDYCES.[2] Comorbidities also increase the risk of DRM and its repercussions.[4] These individuals are often found to have another disease, one that is less commonly studied but equally harmful and linked to the development of complications: sarcopenia. Cerri et al.[8] evaluated the presence of sarcopenia in 103 hospitalised patients with malnutrition or risk thereof: 21.4% of them had sarcopenia, which was associated with a higher rate of mortality. The international group with the most results in this regard, the Gruppo Lavoro Italiano Sarcopenia — Trattamento e Nutrizione [Italian Sarcopenia Working Group — Treatment and Nutrition] (GLISTEN), evaluated the development of sarcopenia in a sample of more than 600 hospitalised older people.[9,10] Of them, 34.7% had sarcopenia on admission,

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and among the patients without sarcopenia on hospital admission, 14.7% met diagnostic criteria for sarcopenia on discharge. DRM combined with loss of muscle mass is of particular importance. Studies by Hu et al.[11,12] found that a combination of sarcopenia and malnutrition was present in 10.6% of patients admitted to a geriatric acute care centre and that the associated risks of death (hazard ratio = 4.78) and readmission were high.

Our group recently reported the results of a study conducted in patients admitted to internal medicine, most of whom had multiple diseases.[13] On admission, 27.5% met criteria for DRM according to Global Leadership Initiative on Malnutrition (GLIM) criteria[14] and 33% met criteria for sarcopenia according to European Working Group on Sarcopenia in Older People criteria.[15] These data were consistent with data from other publications. Having DRM, after adjusting for age, gender and comorbidity, represented an odds ratio (OR) of mortality of 4.36 (95% CI 3.11–5.61, p = 0.021), but having sarcopenia corresponded to a more than eightfold increase in the likelihood of death (OR = 8.16 (95% CI 6.52–9.79, p = 0.012). Both DRM and sarcopenia were associated with a poorer quality of life and sarcopenia also represented a higher likelihood of readmissions (OR = 2.25, 95% CI 1.52–2.99, p = 0.03). Curiously, greater muscle strength measured by dynamometry, not muscle mass, was linked to a better quality of life, fewer readmissions (OR = 0.95, p = 0.026) and a lower mortality rate (OR = 0.85, p = 0.014) after adjusting for age, sex and comorbidity. Hence, it seems to be important to diagnose not only DRM but also sarcopenia.

DRM and sarcopenia might be thought to behave like risk markers for a poor clinical course, but with no possibility of changing the patient's prognosis with a suitable approach. However, numerous studies have shown that a suitable approach can indeed improve that poor prognosis. The EFFORT[16] study found that, in older patients and patients with multiple diseases, early intensive nutritional treatment can reduce mortality rates by 35% and rates of poor clinical courses (intensive care unit admission, major complications, hospital readmission and decline in functional situation) by 21%. Many medical treatments in hospitalised patients cannot compete with those improvements, so it remains striking that there is not much awareness of the importance of nutritional medical treatment in this patient group. Nutritional medical treatment has also been shown to be cost-effective,[17,18] and the European guidelines on nutritional management in patients with multiple diseases support it.[19]

However, the data from the RECALSEEN study in Spain indicate that just 14% of hospitals do universal nutritional screening for DRM and that, although its high prevalence is known, only 12.3 out of every 1000 discharge reports specify its diagnosis.[20] To improve its detection, data science tools can undoubtedly be leveraged in the coming years. Some initial studies have already also detected said higher mortality and worse prognosis in patients with DRM during hospitalisation, though they have also confirmed how little is collected in discharge reports.[21]

Ultimately, if malnutrition and sarcopenia are not diagnosed, they cannot be treated and the poor prognosis and mortality with which they are associated cannot be prevented. Given their high prevalence and the results presented, the diagnosis and treatment of these diseases represent ethical duties. In order to fulfil this duty, practitioners must insist on awareness-raising and training in relation to clinical nutrition among all healthcare professionals. A recent study found that knowledge of clinical nutrition among Spanish residents in non-endocrinology and nutrition specialisations was limited;[22] therefore, it is important to include more training in clinical nutrition in training programmes for all Spanish residents in hospital specialisations, as well as nurses. Regardless of whether one works in a medical or surgical department, it should be borne in mind that any patient admitted to hospital, especially if that patient is older or has multiple diseases, will be at an excessively high risk of suffering from disease- and/or sarcopenia-related malnutrition. Not acting to prevent and treat these diseases will result in unacceptable consequences for patients and exorbitant healthcare expenses, which could further deplete the Spanish healthcare system. Just as managing pain and fever is an obligation for all healthcare professionals regardless of their specialisation, failure to detect and treat malnutrition and sarcopenia is also inexcusable.

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