Endocrinología, Diabetes y Nutrición

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ORIGINAL ARTICLE

Evaluation of nutritional support in a regional hospital[☆]

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Abstract
Introduction: Disease-related malnutrition (DRM) is highly prevalent in Spanish hospitals (occurring in one out of every four patients). The 'Más Nutridos' Alliance has developed an action plan to detect and treat DRM. In Extremadura (Spain), the public health system has included nutritional screening as the only mechanism to fight malnutrition. The results of this strategy are evaluated here.
Patients and methods: An agreement study was conducted in standard clinical practice. Variables collected included the following rates: nutritional screening at entry, coded nutritional diagnoses, nutritional status assessment, nutritional requirements, successful nutritional therapy, weight and height at entry and discharge, referral to a nutritional support unit (NSU). Standards to comparison based on the results of the Netherland Program to Fight Malnutrition.
Results: Nutritional screening rate at entry was 20.5% (95% CI: 18.00–21.00). Coding and nutritional status assessment rate at entry was 13%. Weight and height were both measured in 16.5% of patients at entry and 20% at discharge. Nutritional requirements were estimated in 30% and were poorly monitored (13.3%). Only 15% of patients were referred to an NSU. Significantly lower values were found for all indicators as compared to standards, with kappa values lower than 0.2 in all cases. Data analysis showed poorer results when patients referred to the NSU were excluded.
Conclusions: A strategy to fight malnutrition based on nutritional screening alone is highly inefficient in hospitals such as HVP.
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Evaluación del proceso de soporte nutricional en un hospital comarcal

Resumen

Introducción: La desnutrición relacionada con la enfermedad (DRE) es una enfermedad con alta prevalencia en el medio hospitalario español (uno de cada 4 pacientes). La alianza «Más Nutridos» ha desarrollado un plan de acción para combatir esta entidad. El Sistema Extremeño de Salud ha incluido el cribado nutricional como único paso para luchar contra la DRE. Se realiza una evaluación de los resultados obtenidos por esta estrategia.

Pacientes y métodos: Estudio de concordancia en condiciones de práctica clínica habitual estudiando los siguientes indicadores: tasa de cribado nutricional, tasa de diagnósticos nutricionales codificados, tasa de pacientes con valoración del estado nutricional (VEN), tasa de pacientes con cálculo de requerimientos en función de la situación clínica y el estado nutricional, tasa de pacientes con cumplimiento de requerimientos calóricos y proteicos estimados, tasa de pacientes con peso al ingreso, tasa de pacientes con talla al ingreso, tasa de pacientes con peso al alta, tasa de pacientes derivados a la Unidad de Nutrición Clínica y Dietética (UNCYD). Se comparan con los datos obtenidos por el programa de lucha contra la desnutrición en Holanda, que se utilizaron como estándares.

Resultados: La tasa de cribado nutricional ascendió al 20,5% (IC$_{95}$: 18,00-21,00%). La tasa de codificación y de valoración del estado nutricional al ingreso fue del 13%. El peso se determinó en el 16,5% de los pacientes al ingreso y en el 20% al alta (mismo resultado para talla). En el 30% se realizó un cálculo de requerimientos, que no fue prácticamente monitorizado (4 de 30 pacientes). Solo el 15% de los pacientes fueron derivados a la UNCYD. Todos los indicadores obtuvieron valores significativamente inferiores a los estándares (p < 0,05), con valores de κ que en todo caso fueron inferiores a 0,2. El análisis ofreció resultados peores tras suprimir los pacientes atendidos por la UNCYD.

Conclusiones: Una estrategia integral de detección y tratamiento de desnutrición propuesta por el Sistema Extremeño de Salud basada solamente en un cribado nutricional es ineficiente a todos los efectos en un hospital de las características del HVP.

Introduction

Disease-related malnutrition (DRM) is highly prevalent in Spain, affecting one out of every four hospitalized patients according to the PREDyCES study.[1] The detection and management of DRM is cost-effective in every respect, though it is often underdiagnosed and underestimated by healthcare staff, and usually does not receive adequate treatment.[2] In Spain, a number of scientific bodies and professionals have promoted the 'Better Nurtured' alliance,[3] which aims at promoting awareness of and the inclusion of malnutrition among the national and regional health strategies; at creating communication initiatives and hospital divulgation programs based on scientific evidence, including screening at all healthcare and state and regional government levels; and at supporting clinicians in their collaboration in malnutrition processes in the hospital setting. In order to reach these goals, they have developed an action plan that is detailed on their website.[4] Beginning in 2017, as part of the 2013–2020 Extremadura Health Plan,[5] a universal electronic screening program (the CONUT method) was implemented at Hospital Virgen del Puerto (Plasencia, Spain).[6] This method crosses a number of laboratory test parameters with the demographic databases of patients hospitalized due to any cause in the hospital. It offers a sensitivity of 92.3%, a positive predictive value of 94.1% and a specificity of 91.2%,

with a kappa coefficient (κ) of 0.831 compared with the nutritional assessment gold standard.[7] The assessment algorithm assigns a score according to albumin, lymphocyte and total cholesterol values with the purpose of stratifying nutritional risk as low, moderate or high. The algorithm is shown in Table 1. However, after screening, no subsequent action strategy is implemented by the institution, the physician in charge of the patient being left to decide the required approach in individuals defined as being at nutritional risk according to the abovementioned method.

Study hypothesis and objectives

The aim of the study was to determine whether the isolated implementation of an electronic method for screening nutritional status is able to improve nutritional care as measured by different quality indicators.

Material and methods

Type of study

A concordance study was planned under conditions of standard clinical practice, to investigate the following quality indicators regarding the screening process and the type of