

“The objective of this study was to assess the quality of PNT at a hospital with an established nutrition support team (NST)” Shiroma et al (2015).

Reference:

Shiroma, G.M., Horie, L.M., Castro, M.G., Martins, J.R., Bittencourt, A.F., Logullo, L., Teixeira da Silva, M.L. and Waitzberg, D.L. (2015) Nutrition Quality Control in the Prescription and Administration of Parenteral Nutrition Therapy for Hospitalized Patients. Nutrition in Clinical Practice. February 13th. .

Abstract:

Background: Nutrition quality control in parenteral nutrition therapy (PNT) allows the identification of inadequate processes in parenteral nutrition (PN). The objective of this study was to assess the quality of PNT at a hospital with an established nutrition support team (NST).

Materials and Methods: This observational, longitudinal, analytical, and prospective study examined 100 hospitalized PNT adult patients under the care of an NST for 21 days or until death/hospital discharge. The American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) 2007 guidelines for PNT prescription were followed.

Results: PNT indications were not in accordance with the A.S.P.E.N. 2007 guidelines in 15 patients. Among the remaining 85 patients, 48 (56.5%) did not receive adequate PNT ($\geq 80\%$ of the total volume prescribed). Non-NST medical orders, progression to and from enteral nutrition, changes in the central venous catheter, unknown causes, and operational errors (eg, medical prescription loss, PN nondelivery, pharmacy delays, inadequate PN bag temperature) were associated with PNT inadequacy ($P < .005$). Compared with patients who died, the discharged patients received PN volumes $\geq 80\%$ on most days ($P = .047$). The quality indicators for nutrition therapy related to estimated energy expenditure and protein requirements and glycemia levels reached the expected targets; however, the central venous catheter infection rate was higher than 6 per 1000 catheters/d and did not meet the expected targets.

Conclusion: Despite an established NST, there was a moderate level of PNT inadequacy in indications, administration, and monitoring. It is important to establish periodic meetings among different health professionals who prescribe and deliver PNT to define responsibilities and protocols.



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