

“Catheter-related central vein thrombosis (CRVT) is a severe complication of home parenteral nutrition (HPN) that may be clinically manifest or subclinical” Cuerda et al (2015).

Reference:

Cuerda, C., Joly, F., Corcos, O., Concejo, J., Puiggrós, C., Gil, C. and Pironi, L. (2015) Prospective study of catheter-related central vein thrombosis in home parenteral nutrition patients with benign disease using serial venous Doppler ultrasound. Clinical Nutrition. January 23rd. .

Abstract:

BACKGROUND & AIMS: Catheter-related central vein thrombosis (CRVT) is a severe complication of home parenteral nutrition (HPN) that may be clinically manifest or subclinical. The aims of the study were to prospectively investigate the incidence of CRVT in patients on HPN with benign disease and determine the influence of different variables on this complication.

METHODS: A prospective, multicentre, observational study in the Home Artificial Nutrition-Chronic Intestinal Failure ESPEN group was performed. Patients with benign disease starting HPN or already on HPN after the insertion of a new catheter, were recruited and followed up with Color Doppler Duplex Sonography (CDDS) evaluations at baseline, 1 week, 3, 6 and 12 months after catheter insertion. Fisher’s exact test was used to calculate the association of different variables (related to the patient, type of catheter, vascular access, insertion method, catheter care and anticoagulant treatment) with CRVT events.

RESULTS: Sixty-two patients (31 males, 31 females) aged 50 ± 19 (19-83) years were included and followed for a median 363 days, with an Inter Quartile Range of 180-365 days, and a total of 16,186 catheter-days. Six patients had previous CRVT and 16 had history of thromboembolic disease (pulmonary and mesenteric). Forty one patients were receiving anticoagulant treatment. Fifty two patients had tunneled catheters and 10 implanted ports. Two patients had symptomatic thrombosis at 3 and 12 months of follow-up (2 and 3 weeks after normal routine CDDS evaluation). The incidence of CRVT was 0.045/catheter/year. CRVT was not significantly associated with any of the variables analyzed.

CONCLUSIONS: The incidence of CRVT in patients on HPN for benign disease followed by CDDS is low in the first year of catheterization. We did not observe any case of asymptomatic CRVT. Based on our data, CDDS seems to have low effectiveness as a screening tool for CRVT in asymptomatic patients on HPN with benign disease.

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