



Extravasation of Parenteral Nutrition by Peripheral Venous Access

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Clinical Image description

A 62-year-old man was hospitalized for stenosing esophageal neoplasia. He was started on Peripheral Parenteral Nutrition (PPN) through left basilic vein, while waiting for prosthesis placement. During the night, a large amount of nutrition overflowed. The following day, he presented with exuberant inflammatory signs of the entire left upper limb, with tense vesicular lesions, with a serous content, and areas of clean base epidermolysis and regular borders. He was evaluated by Plastic Surgery and performed Computed Tomography, which excluded neurovascular involvement, but noted the presence of gas bubbles in subcutaneous cellular tissue of the forearm, suspected

of an infectious process. The approach involved limb elevation, dressing care with povidone-iodine compresses and fat gauze, empirical antibiotics with Ceftriaxone and Clindamycin and systemic corticosteroid therapy for 14 days. He showed complete resolution of inflammatory signs. PPN is indicated in cases where it is expected to be needed for a period of 7 to 10 days, being preferred for its ease of access and handling. Compared to central access, it is associated with fewer complications, but it is not without risks [1,2]. Complications of peripheral venous access are related to the type and handling of the catheter, its length of stay and characteristics of the drug administered [3].



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The leakage of PPN causes tissue damage, which can result in compartment syndrome [4]. Its treatment can vary from a conservative non-surgical approach, to debridement, graft or amputation. It is unclear what the role of local antidotes is, but there is evidence supporting the use of topical nitroglycerin, amorphous hydrogel or hyaluronidase injection [4-6]. The minimization of risk factors, monitoring of complications and their timely identification are essential in preventing this potentially serious complication.



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