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Società Italiana di Nutrizione Artificiale e Metabolismo

USE OF DOUBLE-LUMEN PERIPHERALLY INSERTED CENTRAL CATHETER (DL-PICC) FOR SIMULTANEOUS HOME CHEMOTHERAPY AND PARENTERAL NUTRITION IN A CANCER PATIENT. A CASE SERIES.

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Background and aims

Few patients with advanced cancer have an indication for both chemotherapy and total parenteral nutrition. Incompatibilities between intravenous medication, such as 5-fluorouracil, and parenteral nutrition, however, can cause microemboli induced by precipitation on nutrients. Use of a (DL-PICC) can decrease the risk of drug-nutrient interaction and increase patient comfort.

Methods

A 64-year-old male suffered from distal thoracic esophageal cancer with gastric extention and a 55-year-old male suffered from gastric cancer with bone metastasis. Patients characterization is reported in table 1. Both patients had symptomatic dysphagia, inadequate caloric and fluid intake. DL-PICC were implanted to administer neoadjuvant chemotherapy (FLOT: Fluorouracil, Leucovorin, Oxaliplatin, Docetaxel) concomitant to Total Parenteral Nutrition (TPN: 30 ml/kg, 30 kcal/kg, proteins 1,2 g/kg). The device were Power and Arrow type respectively, 5 Fr and intravascular lenth 40 cm both.

Results

The DL-PICC was simultaneously used for the first 8 weeks of chemotherapy and no complications were observed during the application of TPN. Later dysphagia improved and TPN was reduced to a frequency of 3 times a week. No delay or interruption of chemotherapy occurred.

Conclusions

A double-lumen device permits administration of both chemotherapy and nutrients in a safe way, preserving the comfort of cancer patient with severe dysphagia.

Table 1: Patients characteristics

	sex	age	Weight loss / 6 months	BMI (kg/m^2)	dysphagia*
1	male	64 yrs	10 %	22	grade 3
2	male	55 yrs	12 %	20	grade 3

*According to Common Terminology Criteria for Adverse Events v.3.0

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