A Novel Approach in Patient Treatment: Home Parenteral Nutrition with Concurrent Chemotherapy

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ABSTRACT:

Introduction: We describe a case in which improving symptoms and quality of life are the main objectives. A 68 year old female was diagnosed with advanced gastric adenocarcinoma with extensive peritoneal involvement. She developed multiple complications namely a complete bowel obstruction, malignant ascites, bilateral lower limb edema and cancer cachexia. Her symptoms were managed with naso-gastric tube insertion for gastric decompression and indwelling peritoneal catheter.

Methods: Parenteral nutrition (PN) was initiated in the ward in order to improve her nutritional status and functional condition to prepare her for chemotherapy. Concurrent FOLFOX-4 with PN was planned. For her to return home, patient together with caretaker were taught and trained on catheter care as well as chemotherapy and PN handling at home. Succeeding multiple hands-on training, the patient was discharged with home parenteral nutrition (HPN). Two weekly appointments were given for modified FOLFOX-6 chemotherapy administration together with infusion bottle installation (for home chemotherapy infusion), HPN monitoring and catheter care re-assessment. Patient was monitored for up to 1 year in life.

Results and Discussion: Patient had received nine cycles of chemotherapy alongside PN with no complications and her blood results are within normal limits. Her naso-gastric effluent has reduced significantly and the ascites has diminished. These allow the removal of long-term naso-gastric decompression tube and indwelling peritoneal catheter. Her ECOG has improved from ECOG 2 to 1, progressive weight loss was prevented and lower limb edema has reduced which improves her mobility. Patient's successfully able to be with the HPN program for 371 days with only one episode of catheter related blood infection that require hospitalization. Unfortunately, she succumbed to her disease 14 months after being diagnosed.

Conclusions: PN has helped to improve patient functional condition which expands the option of having chemotherapy for the patient which in turn reverses her symptoms. Concurrent administration of PN and chemotherapy prove to be feasible and safe in this patient. Modifying treatment modalities so that patient can be comfortable at home has improved patient quality of life tremendously.

KEYWORDS: