Cancers are among the leading causes of morbidity and mortality worldwide. Although cancer treatment has improved, the frequent development of malnutrition (MN) induced by tumor or its treatment is a frequent clinical problem, achieving the best possible patient outcomes. 1 MN occurs in about 40-60% of cancer patients 4-1 and is associated with poor outcomes and elevated morbidity. 1 Clinical Nutrition (CN), defined as an evaluation of a patient's nutrition intake and/or parenteral nutrition (PN) can enhance bodily resources and tolerance of cancer treatments, thereby improving patient quality of life. 2,3 The European Society for Clinical Nutrition and Metabolism (ESPEN) guidelines recommend screening for MN. 2 There is limited knowledge about real-world prevalence of MN, the current use of CN, and associated healthcare resource use in real-world settings. The study was set to investigate: (i) diagnosis, frequency, and treatment of MN in current clinical practices in oncology, (ii) hospital resource use and (iii) timing of CN use and cancer patients’ survival outcomes based on retrospective real-world data from France, Germany, and Italy.

RESULTS

Malnutrition diagnosis and treatment in current clinical practice

- France: MN diagnosis at first hospitalization occurred in 10% of GI cancer patients, whereas 13% of patients were diagnosed after first hospitalization and 77% had no MN diagnosis noted during the study period.
- Germany: across five cancer types, the share of patients who received HPN was 16%, on average. Up to 40% of the metastatic gastric cancer patients suffering from cachexia were not treated with HPN.
- Italy: about 8.4% of patients with metastatic cancer diagnosis received CN. Among patients with metastasis who received CN, only 11% were diagnosed with MN.

Timing of Clinical Nutrition initiation in cancer patients

- The French data suggest that the number of cancer patients diagnosed with MN was increasing year on year; and the MN diagnosis rate was lower in non-elderly population when compared to elderly patients (>70 years).
- About 35% of cancer patients in Italy started CN early after diagnosis of metastasis, whereas 18% of patients received CN more than one year later after diagnosis (Figure 1, left panel). In Germany, the time from start of cancer treatment to the initiation of HPN varied widely by cancer indication, with an average of one year (337 days) delay (Figure 1, center and right panel).
- When considering CN initiation in relation to time of death, the data showed that the majority of metastatic cancer patients started CN only in the last months of their life, therefore, CN is often used as an “end-of-life” intervention (Figure 2). Specifically, in Italy, more than 50% of cancer patients died shortly after CN initiation, and only 15% of metastatic patients received CN more than 7 months before they deceased.

Associated clinical and economic benefits of Clinical Nutrition in oncology

- In Germany, data suggested that metastatic patients who did not receive HPN survived on average 70 days less, compared to those who did receive HPN and lived longer (Figure 2, central panel).
- French and Italian studies demonstrated the advantages of early CN diagnosis and treatment. Data analysis showed that the use of CN significantly increased the survival rates compared to patients who were not treated. (Table 1).
- Metastatic malnourished patients who were treated and had shown a significant improvement in survival of over 3 months especially in gastrointestinal and gynecological cancers (Figure 3). Cancer patients diagnosed with MN who received CN early after diagnosis of metastatic lived longer than patients who received CN after the diagnosis of metastasis (4).

CONCLUSIONS

- Multiple investigations across three European countries suggest that early screening, diagnosis and treatment of malnutrition is associated with improved quality of life, clinical outcomes and reduction of healthcare resources use and hospital costs.
- Apparent survival benefits of earlier use of CN call for further research. Clinical Nutrition offers an opportunity to optimize the management of the disease and benefit the patient.
- The oncology and payer community needs to engage in defining the best practices to optimise cancer patient care and use of healthcare resources.

REFERENCES


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