Gastric cancer is the fifth most common malignancy in the world and the third leading cause of cancer death in both sexes worldwide (1). In Brazil, it was estimated that 20,520 new cases of gastric cancer would occur in 2010 (2). In most cases, gastric cancer is diagnosed at advanced stage, which complicates the treatment (3). Gastric cancer costs approximately USD 3,773 per patient to the Brazilian public healthcare system, representing an important economic burden (4). There is no evidence on the management of patients with Advanced Gastric Cancer (AGC) after failure of 1st-line treatment.

This real-world study describes the patterns of care and clinical profile of advanced gastric cancer, in addition to the use of resources, in Brazil.

METHODS

Data from medical charts were retrospectively collected from five centers in Brazil, with Ethics Committee approval of all study interventions.

Key eligibility criteria include age greater than or equal to 18 years at the time of diagnosis, survival of at least 3 months. Patients were included in the study if they had ≥18 years old, had ≥3 months of follow-up, and had not participated in a clinical trial. Data were summarized by measures of central tendency and dispersion (quantitative variables) and in absolute and relative frequencies (qualitative variables).

RESULTS

Among 404 screened patients, 151 (37.4%) complied with all selection criteria, and 93 (31.1%) of them from the public healthcare system and 58 (36.4%) from the private setting. Patients’ demographic and clinical characteristics are described in Table 1. All 404 patients (100.0%) had more than one metastasis site. Tumor localization and metastatic sites are described in Figures 1 and 2, respectively.

• Number of patients who received each treatment line is described in Table 2, while ECOG scores for first-, second-, and third-line treatments are described in Table 3.
• Twenty-two and 19 different regimens were used as 1st- and 2nd-line treatments, respectively. CapeOx (15, 18.6%), and EOX (11, 13.6%) were the most frequent 1st-line regimens, while trastuzumab (29, 35.7%), paclitaxel (18, 10.5%), and CapeOx (15, 11.8%) prevailed in 2nd-line treatment (Figure 3 and 4). In first-line treatment, 3 patients (1.3%) received trastuzumab in combination with chemotherapy.

• This study presents some limitations: retrospective studies often have incomplete data; treatment patterns represent only the practices of physicians who participated in the study; results do not allow conclusions for causal relationships; data were summarized by measures of central tendency and dispersion (quantitative variables) and in absolute and relative frequencies (qualitative variables).

CONCLUSIONS

• Although treatment patterns for patients with ACS in Brazil are largely heterogeneous, the most commonly used chemotherapeutic schemes were oxaliplatin-based and irinotecan in first and second-line, respectively.

• Late diagnosis and poor outcomes for first- and second-line reflect the real-world ACS management in Brazil. These results may contribute to the development of new strategies and guidelines in the country.

Table 1. Tumors’ demographics and clinical characteristics.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>P-value</th>
</tr>
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<tbody>
<tr>
<td>Age</td>
<td>61.3±10.3</td>
<td>61.2±10.3</td>
<td>61.4±10.2</td>
<td>0.8842</td>
</tr>
<tr>
<td>Sex</td>
<td>151 (37.4%)</td>
<td>83 (37.6%)</td>
<td>68 (32.6%)</td>
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<tr>
<td>Race</td>
<td>115 (28.5%)</td>
<td>63 (28.7%)</td>
<td>52 (25.7%)</td>
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<tr>
<td>Age at diagnosis of gastric cancer</td>
<td>61.3±10.3</td>
<td>61.2±10.3</td>
<td>61.4±10.2</td>
<td>0.8842</td>
</tr>
<tr>
<td>Primary location</td>
<td>45 (11.1%)</td>
<td>27 (12.1%)</td>
<td>18 (8.8%)</td>
<td>0.089</td>
</tr>
</tbody>
</table>

References


Figure 3. Kaplan-Meier curve with 95% confidence intervals for overall survival (OS) and disease-specific survival (DSS) for patients with gastric cancer.