Review: chemotherapy plus supportive care improves survival and quality of life in advanced or metastatic gastrointestinal cancer more than supportive care alone


Are cancer treatments that include supportive care (SC) more effective than SC alone for improving length of survival and quality of life in patients with advanced or metastatic gastrointestinal (GI) cancer?

METHODS


Study selection and assessment: randomised controlled trials (RCTs) in any language that compared chemotherapy, radiotherapy, or surgery with SC interventions for patients >18 years of age who were diagnosed with and treated for cancer of the stomach, GI/gastric cancer, or colorectal/colon cancer in any setting and assessed >1 of symptom control, pain relief, or quality of life (QOL). Individual study quality was assessed using the 5 point Jadad scale and the 7 point Rinck scale.

Outcomes: included length of survival, QOL, symptom control, pain severity, pain relief, adverse effects, and disease progression.

MAIN RESULTS

4 trials (n = 483) met the selection criteria; all compared chemotherapy plus SC with SC alone in patients with advanced/metastatic GI cancer. Definitions of SC varied; however, SC included analgesics in 4 trials, antibiotics in 2 trials, and psychological support in 1 trial. Jadad scores ranged from 2–3 out of 5, and Rinck scores ranged from 4.5–5.5 out of 7.

Meta-analysis was not done because of heterogeneity among studies. Each of the 4 trials showed that patients who received chemotherapy plus SC survived longer than those who received SC alone (table). 2 of 3 trials that measured QOL showed a statistically significant difference for chemotherapy plus SC compared with SC alone (p<0.002, p<0.005). Chemotherapy plus SC improved symptom control in the absence of toxicity (1 trial, p<0.001) and increased pain free survival more than SC alone (1 trial, p = 0.003). Adverse events were more frequent in the chemotherapy plus SC groups. All 4 trials found that patients who received chemotherapy plus SC had stable disease or longer median time to progression than those who received SC alone (p<0.005).

CONCLUSION

Chemotherapy plus supportive care improves survival and quality of life and delays disease progression more than supportive care alone in patients with advanced or metastatic gastrointestinal cancer.

Chemotherapy plus supportive care (SC) v SC alone for patients with gastrointestinal cancer*

<table>
<thead>
<tr>
<th>Patients’ conditions</th>
<th>Number of patients</th>
<th>Comparison</th>
<th>Survival</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced CR and stomach cancer refractory to CHT</td>
<td>107</td>
<td>Oxtreotide v SC</td>
<td>20 v 11 weeks</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Metastatic CR cancer that progressed within 6 months of treatment with fluorouracil</td>
<td>279</td>
<td>Irinotecan plus SC v SC</td>
<td>9.2 v 6.5 months</td>
<td>0.0001</td>
</tr>
<tr>
<td>Previously untreated, inoperable, locally recurrent or metastatic CR cancer</td>
<td>36</td>
<td>Combination CHT plus SC v SC</td>
<td>11 v 5 months</td>
<td>0.006</td>
</tr>
<tr>
<td>Advanced, surgically incurable stomach cancer</td>
<td>61</td>
<td>ELF or FLv plus SC v SC</td>
<td>8 v 5 months</td>
<td>0.003†</td>
</tr>
</tbody>
</table>

CR = colorectal; CHT = chemotherapy; combination CHT = 5-FU, leucovorin, and cisplatin; ELF = 5-FU, leucovorin, and etoposide; FLv = 5-FU and leucovorin.
†Patients could receive SC.
‡Significant only after correction for imbalances in pretreatment characteristics.

Commentary

The review by Ahmed et al of SC for patients with GI cancer is as important for the issues it raises around the terminology used in this area as it is in the finding that chemotherapy plus SC improves survival and QOL more than SC alone.

All 4 studies included in the review were published in the 1990s, and since then, considerable work has been done investigating psychosocial support and QOL. The authors report that the definitions of SC used in the studies reviewed were heterogeneous and incomplete compared with a later, broader definition of SC that includes care of physical, psychosocial, spiritual, and cultural needs. This meant that although all 4 studies focused on SC, their results could not be compared directly.

Another issue in the review by Ahmed et al is whether the term SC or best SC should be used. What is most important is that researchers provide a clear and detailed definition of SC and its outcomes to allow comparisons among studies and implementation in clinical settings. The use of standardised, tested QOL measures will assist in creating consistency across studies. Incorporating the use of QOL tools enables both optimal care of patients in clinical practice and the development of a research base.

Ahmed et al also identified that patients >75 years of age were excluded from the trials reviewed despite the high incidence of cancer and related deaths in this age group. This may reflect that chemotherapy is less commonly offered to elderly patients, but limits the applicability of the findings in other clinical settings.

Overall, this review identified that use of chemotherapy plus SC is more beneficial than SC alone. It also raises issues of documentation and language relating to SC that can be used to inform future studies.

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