モバイルフレンドリーなウェブアプリケーションが肺がんの生存期間を延長する（Abstract LBA9006）

ウェブを介したフォローアップアプリケーションは進行肺がん治療後の生存期間を改善した

Web-mediated follow-up application improved survival following treatment for advanced lung cancer

第III相試験の結果、受診日間の症状を自己報告するウェブアプリケーションにより、標準的なフォローアップに比べ、1年生存率が26%上昇したことが示された。初回化学療法、放射線療法、または手術終了後、stage III/IV肺がん患者133人が、ウェブを介したフォローアップまたは標準的なフォローアップの群にランダムに割り付けられた。全生存期間中央値は、このアプリケーションを用いた患者では19か月であったのに対し、標準的なフォローアップ患者では12か月であった。患者のQOLもまた、このアプリケーションを用いた患者の方が優れていた。このスタディ結果は2016年American Society of Clinical Oncology年次集会で発表された。

Full Text

A Web-mediated follow-up application (Moovcare™) improves advanced lung cancer survival, according to a French multicenter randomized phase III study. Researchers analyzed the association and evolution of self-reported clinical symptoms over time. The median overall survival of patients who used the application was 19 months, compared to 12 months for those who received standard follow-up care. Patient quality of life was also better among patients who used the application.

The study was presented at the 2016 American Society of Clinical Oncology (ASCO) Annual Meeting.

"Through personalized follow-up using this convenient and simple online application, we can detect complications and signs of relapse and offer appropriate care earlier," said lead study author Dr. Fabrice Denis, MD, PhD, a researcher at the Institut Inter-regional de Cancérologie Jean Bernard in Le Mans, France. "This approach introduces a new era of follow-up in which patients can give and receive continuous feedback between visits to their oncologist."

After completing initial chemotherapy, radiation therapy, or surgery, 133 patients with stage III/IV lung cancer were randomly assigned to Web-mediated follow-up or standard follow-up. The standard follow-up included doctor visits and CT scans every 3-6 months (or more often at the researcher's discretion).

Patients in the Web-application group had the same schedule of planned doctor visits but three times fewer scheduled scans. They used the Web application to self-assess symptoms weekly. Caregivers could also enter data on behalf of the patients. The application analyzed 12 symptoms and reported results to the oncologist. An algorithm assessed specific changes in symptoms and triggered email alerts for the doctor, who would then confirm the need of anticipated exams/visits to adapt cancer treatment, including supportive care options.

At one year, 75% of patients were still alive in the Web-application group, compared to 49% in the standard follow-up group. The study was stopped at planned interim analysis because of good results.

Relapse rates were similar in both groups: 51% and 49% in the standard and Web-application groups, respectively. The general well being of patient (performance status) at the time of relapse was good in the Web-application group, so the majority (74%) of those patients were able to receive the full recommended treatment for the recurrence. In contrast, only one-third of patients in the standard follow-up group were well enough to receive optimal treatment for cancer recurrence.

Overall quality of life assessed using standard quality-of-life questionnaires FACT-L, FACT G, and TOI, was better in the Web-application group. Web-application follow-up also reduced by 50% the average number of imaging tests per patient per year.

The findings are consistent with the results of two other studies using tele-health follow-up. However, according to the authors, this is the first randomized trial showing a major improvement in survival with Web-mediated follow-up versus standard follow-up. It is also the first time that an algorithm for early detection of a symptomatic relapse or complication was used to trigger early supportive care or treatment.

In addition, review of patient-reported symptoms did not add burden to the doctors: on average, it took oncologists only 15 minutes per week to follow 60 patient and automated decreased the frequency of patient phone calls to the office.

Lung cancer is the most common cancer worldwide. In 2012, there were 1.8 million new lung cancer diagnoses worldwide and an estimated 1.59 million deaths due to lung cancer. Despite advances in surgery, chemotherapy, radiotherapy, targeted therapy, and immunotherapy, lung cancer remains a devastating disease. According to the authors, almost all (80-90%) lung cancer relapses are symptomatic.

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