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Hitachi launches "treatment support for cancer drug therapy" using AI interviews & tablet robots

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The Cancer Institute Ariake Hospital and Hitachi will carry out this research from the end of November 2020 to the end of March 2022 as part of measures to reduce the workload of medical staff.



The Japanese Foundation for Cancer Research Ariake Hospital and Hitachi, Ltd. are using tablet robots. From the end of November 2020, the team will start an evaluation study on the effects of using it for prior confirmation of the physical condition and side effects of patients undergoing drug therapy. The patient's condition will be grasped before outpatient treatment, support the provision of more appropriate treatment, and evaluate the effect of reducing the burden on medical staff.

Many medical institutions, including the Cancer Institute Ariake Hospital, are working on medical safety for the safety and security of patients. The Cancer Institute Ariake Hospital and Hitachi will carry out this research from the end of November 2020 to the end of March 2022 as part of measures to reduce the workload of medical staff.

As a first step, a tablet-type robot will check the onset of side effects of anticancer drugs that pharmacists have been doing while waiting for a doctor's consultation for colorectal cancer patients who receive outpatient drug therapy. It is done using the results of the interview are stored on a server in the hospital, and the pharmacist checks the results of this tablet interview on a PC to determine if a face-to-face interview is necessary. In addition, information on the patient's condition is analyzed using AI together with the test results such as blood tests on the day of the outpatient, and the administration of anticancer drugs and patients who have side effects and need attention on the day of treatment is postponed. Patients are classified based on who should be treated better and build a mechanism to prevent side effects from being overlooked. In addition, team will verify the mechanism by which medical professionals such as pharmacists, doctors, and nurses can share information on the analysis results. In the second stage, we are planning to build and verify a mechanism that can analyze biological information such as facial expressions during interviews.

Through these efforts, the time it takes for a pharmacist to interview a patient can be shortened, the work burden can be reduced, and side effects can be reduced by performing treatment according to the patient's condition.

Cancer Institute Ariake Hospital and Hitachi are participating in the research and development project of "Advanced Diagnosis and Treatment System by AI Hospital", which is a project of Strategic Innovation Creation Program (SIP), which has been implemented since 2018.