Construction of a database on the initial symptoms of an adverse reaction

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[Introduction] There are comparatively many situations in which the petition of an initial symptom of an adverse reaction from a patient is encountered in a typical medical examination and pharmacy business. An unsatisfactory outcome can be prevented by taking a prompt action, when the petition is heard. We compiled the adverse reaction term from the public appending document of prescription drugs, and matched the associated expression used to describe the initial symptom of the adverse reactions. We then constructed a database that can promptly presume a temporary diagnosis.

[Methods] From the public appending document of all prescription drugs as databased, the XML-tag original in those documents was embedded, and the adverse reaction term was extracted. The extracted adverse reaction term was classified into two classes: high rank and low rank words. The terms of the adverse reaction classified as high rank words were narrowed down to only the term of serious side effects, and the expression of the initial symptom of side effects was created. These initial symptom expressions were further classified into the following four items: the symptom which only he understands, the target symptom which only others understand, the symptom known also by him or others, and the symptom which appears in inspection.

[Results and Discussion] To provide quick and efficient evaluation performance with complete safety measures of the side effects information for patient safety management, the practical use of IT technology is indispensable. We think that the usefulness of this database is high. We want to carry this database in a system and to perform verification on the clinical spot.