## New diagnostic weapon: Genetic tests can also detect infectious disease

Doctors routinely use genetic tests to spot inherited diseases and guide cancer treatment. But using them to detect infectious diseases is so new that few doctors and even fewer patients know they're available. A study of one test is published [June 12 in the] New England Journal of Medicine.

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Several companies and university labs now offer gene-based tests on blood or spinal fluid. Once fragments of foreign DNA or other genetic material are found, their code is analyzed, or sequenced, to identify bacteria, viruses, fungi and parasites causing sepsis, meningitis, encephalitis and other deadly illnesses.

"The key advantage of sequencing is it can look for everything at once" rather than doing separate tests for each virus or other microbe that's suspected, said Dr. Charles Chiu, a microbiologist at the University of California, San Francisco.

He led the New England Journal study that tried a spinal fluid test on 204 children and adults with meningitis or encephalitis, dangerous illnesses that aren't always caused by an infection.

The gene test wasn't perfect. It missed some cases, but also found others that standard tests missed.

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Doctors say the gene-based tests could be a fast, non-invasive first step for serious or unusual cases.

Read full, original post: New gene tests for germs quickly reveal source of infections