

Letter to the Editor

An Automated Electronic Screening Tool (DETECT) for the Detection of Potentially Irreversible Loss of Brain Function

by Dr. med. Anne Trabitzzsch, Konrad Pleul, PD Dr. med. Kristian Barlinn, Volkmar Franz, Dr. med. Markus Dengl, Dr. med. Monica Götze, Dr. med. Andreas Güldner, Prof. Dr. med. habil. Maria Eberlein-Gonska, Prof. Dr. med. Detlev Michael Albrecht, and Prof. Dr. med. Christian Hugo in issue 41/2021

DETECT Should Force Us To Think About the Situation of Our ICUs

In the article (1), a tool is presented that can inform doctors about a possible existence of brain death based on a symptom combination of lack of pupillary reaction and deep unconsciousness. Obviously It is a useful tool. This should force us to think about the situation of our ICUs.

Why doesn't the physician responsible for the patient in the intensive care unit take 20 minutes a day to consider, without haste, the patient's overall condition? This would also give the physician time to think about the neurological situation and to consider, without the e-mail generated by DETECT, which neurological outcomes can be expected for each patient. Irrespective of the question of organ donation, this would be information that is essential in discussions with relatives and when determining the goal of therapy.

The article also gives the reasons why such a tool is necessary in light of the failure of medical care (and it must be described as such, if the possibility of brain death is not considered even given

a lack of pupillary reaction and deep unconsciousness): labor intensification, shift work, high caseload and a simultaneous staff shortage, economic pressure in the hospitals, in addition to medical focus on immediate healing.

Changing this would benefit not only those waiting for a donor organ but also the patients currently being treated in an intensive care unit. An additional 20 minutes of a physician's working time per patient and day—not for more procedures, but for reassessing the therapy—would cost less than 30 Euros per day/per patient.

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Reference

1. Trabitzzsch A, Pleul K, Barlinn K, et al.: An automated electronic screening tool (DETECT) for the detection of potentially irreversible loss of brain function. *Dtsch Arztebl Int* 2021; 118: 683–90.

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Conflict of interest statement:

The author declares that no conflict of interest exists.

In Reply:

DETECT is a simple tool that requires only two set parameters, collected multiple times a day from each patient in every intensive care unit, and that can remedy a deficit in the detection of patients with possible impending irreversible loss of brain function (ILBF).

Nevertheless, we do not intend to conclude that there is a problem with (non)recognition of the overall condition of the intensive care patients and their treatment (as therapy-limiting, prognosis assessments are in fact made), but rather that a link to the option of a potential organ donation is lacking. In fact, we are convinced that patients receive excellent intensive medical care. Unfortunately, for the reasons described in the article, this does not fundamentally include the question of organ donation. Additionally, transplant physicians are not necessarily the treating physicians. DETECT can help to close communication gaps here.

Our article (1) also describes the problem of “the absence of a legal presumption of willingness to donate unless the patient has made a prior statement of his/her willingness to do so, and the consequent absence of broad social agreement with regard to such a presumption”. The ongoing political and social taboo about the topic of organ donation, which makes organ donation an exception rather than the norm, makes it difficult to “take it into consideration” and to focus on the relevant patients in the intensive care units of German hospitals.

DETECT overcomes this main problem by automatically focusing on the few eligible patients from a large number of

intensive care patients, with a reduction by a factor of 30 (for instance, only 200 of the almost 6 000 patients in the Dresden University Hospital would be considered). In our opinion, both this focus and the expanded detection of a rarely occurring diagnosis that includes the possibility of a potential organ donation determine the special value of our tool.

We are convinced that a tool like DETECT can give both intensive care physicians and transplant coordinator additional time to further optimize treatment for intensive care patients.

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Reference

1. Trabitzzsch A, Pleul K, Barlinn K, et al.: An automated electronic screening tool (DETECT) for the detection of potentially irreversible loss of brain function. *Dtsch Arztebl Int* 2021; 118: 683–90.

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