

DIFFNET

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Migraine and tension-type headache (TTH) are among the most common medical complaints and causes of disability, chronically afflicting up to 5% of the population. Coming up with a set of potential diagnoses for a clinical complaint – that is, a differential diagnosis – is an important part of any clinical practice. This process is especially important in Headache Medicine: often clinicians find themselves with a potential diagnosis that only fits some of the symptoms presented. In these cases, a list of differential diagnoses becomes crucial in helping clinicians rule out alternative disease processes.

Description:

A physician practicing in the Neurology Department at Rutgers Robert Wood Johnson Hospital developed the DIFFNET software to produce a list of differential diagnoses once a potential diagnosis is given. Specifically, once a headache diagnosis is entered into DIFFNET, a list of differential diagnoses is presented to the user. This differential diagnosis is generated based entirely on the International Classification of Headache Disorders 3 (ICHD3), the gold standard document for headache diagnosis.

Benefits:

Existing differential diagnosis software typically asking about a pre-defined set of symptoms as a starting point. Clinical history can be vague, and classification based on a checkbox approach enables diagnostic bias. In addition, existing software are built on data sources that do not have headache medicine as a primary focus. As such, they are not best suited for headache differential diagnosis per se.

In contrast, DIFFNET:

- Starts with the physicians intuition regarding a clinical scenario and potential diagnosis;
- Utilizes state of the art diagnostic criteria in Headache Medicine -- Generates a differential diagnosis based on ICHD3, which is the latest expert consensus for diagnosis in headache disorder

Target Users:

- Primary Care Physicians
- Neurologists
- Headache Physicians
- Medical Educators

Intellectual Property & Development Status:

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