Systematic overview of neuroanatomical differences in ADHD: Definitive evidence.

Vieira de Melo BB, Trigueiro MJ, Rodrigues PP.


Abstract

OBJECTIVES:
This article seeks to identify neuroanatomical differences in ADHD through an overview of systematic reviews that report encephalic differences compared to a control group in volume, area, activation likelihood or chemical composition.

METHODS:
We conducted a systematic search using Cochrane guidelines and PRISMA criteria in PubMed, Scopus, Web of Science, Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects.

RESULTS:
Results revealed broad encephalic involvement that includes a functional frontal and cingulate hypoactivation and structural differences in corpus callosum, cerebellum and basal nuclei.

CONCLUSIONS:
ADHD symptoms might be due to a multi-network unbalanced functioning hypothesis.