

THE AMYGDALA DISCOVERY

A DESCOBERTA DA AMÍGDALA

Eliasz Engelhardt¹

The amygdala is a complex nucleus embedded in the anterior part of the temporal lobe, widely connected with other structures of the brain. It is part of the limbic system and appears to play an important role in complex behaviors, memory, and autonomic integration¹. The structure was first identified, anatomically described, named (*Mandelkern - nucleus amygdalae*), and depicted in a cor-

onal section of the human brain (1822) by Burdach (Figure A)². It was further detailed by Meynert (1876), and later by Johnston (1923), who introduced the basic description of this structure, largely accepted nowadays¹. Magnetic resonance imaging allows for an in vivo visualization of the amygdala (Figure B).

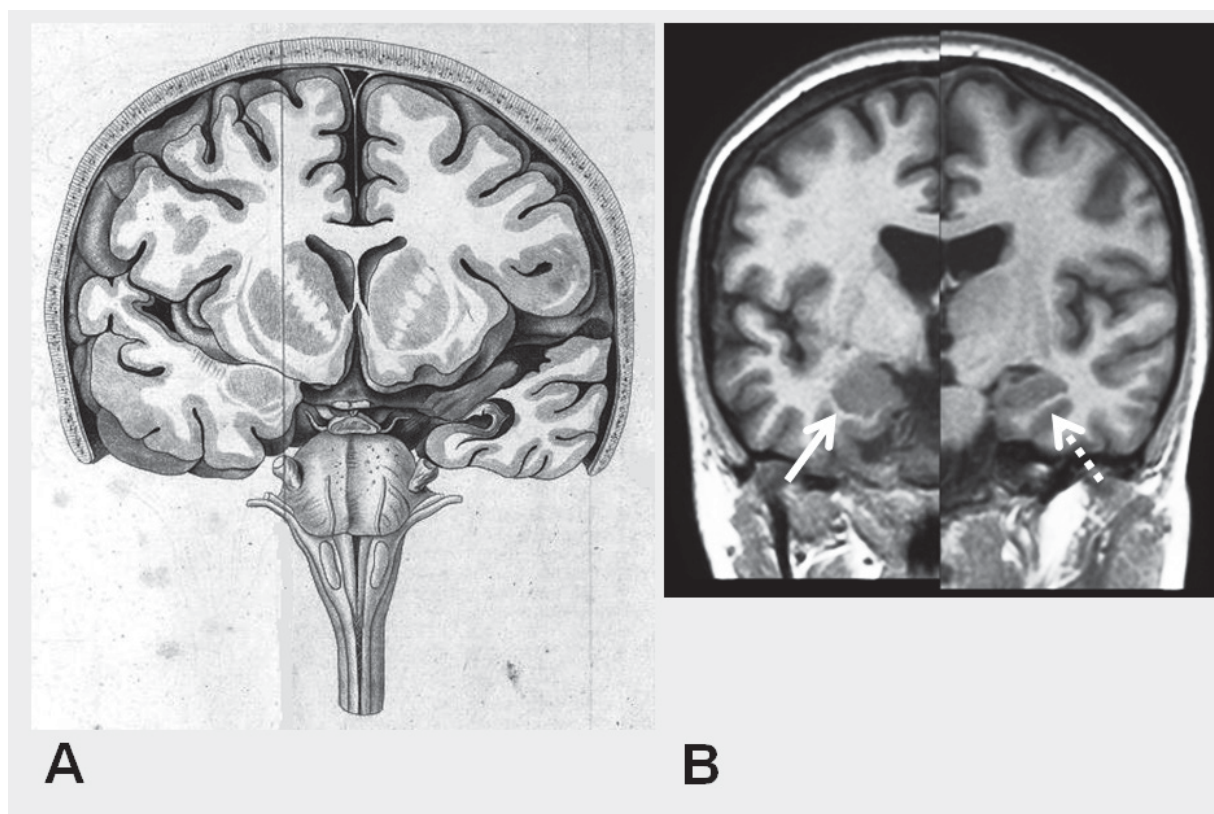


Figure: Amygdala: drawing and MRI.

A. Burdach's drawing of coronal (somewhat oblique) section of a human brain: more anterior at the left, in order to make visible the amygdala (*Mandelkern*), and more posterior at the right, to show the Ammon's horn [hippocampus] (Plate III, part)².

B. MRI – T1 sequence. Composite coronal sections of the brain: at the left side the amygdala is shown (solid arrow), and at the right side the hippocampus is shown (dashed arrow).

REFERENCES

1. Swanson LW, Petrovich GD. What is the amygdala? *Trends Neurosci* 21:323-331, 1998.
2. Burdach KF. *Von Baue und Leben des Gehirns*. Band 2. Leipzig: Dyk, 1822. [Retrieved from: <http://www.biusante.parisdescartes.fr/histoire/medica/resultats/?cote=06505x02&do=pdf>]

¹Cognitive and Behavioral Neurology Unit – INDC/CDA-IPUB-Institute of Psychiatry – UFRJ - Rio de Janeiro - RJ - Brasil

Address for correspondence: eliasz@centroin.net.br