Teaching NeuroImages: Fused brain

Does face predict the brain?

Kamaldeep Arora, MD
Rashmi Ranian Das, MD
Arundee Arora, MD

Correspondence & reprint
requests to Dr. Arora:
arunarora7@gmail.com

Figure Alobar holoprosencephaly

(A) Clinical picture of the child showing no dysmorphism. (B, *) T1-weighted axial MRI showing fused (uncleaved) frontal lobes with absent anterior midline fissure. (C) T1-weighted sequence showing fused basal ganglia (white arrows) and fused thalami (black arrows). (D, ★) Coronal MRI showing monoventricle.

A term male infant born by normal vaginal delivery was diagnosed to have holoprosencephaly on antenatal ultrasound, which was confirmed by postnatal MRI as alobar holoprosencephaly (figure). Clinical examination revealed no microcephaly or dysmorphism, except flat nasal bridge.

Holoprosencephaly denotes an incomplete/absent division of embryonic forebrain into distinct lateral cerebral hemispheres, and is of 3 types.¹ The alobar type results in a horseshoe-shaped monoventricle, absent interhemispheric fissure, septum pellucidum,

and olfactory bulbs, fused thalami, and corpus-callosum agenesis. Facial malformations, varying from subtle to severe, are usually the mirror of underlying brain malformation, but the index case is a unique clinical lesson.²

REFERENCES

1. Dubourg C, Bendavid C, Pasquier L, et al. Holoprosencephaly. *Orphanet J Rare Dis* 2007;2:8.
2. Plawner LL, Delgado MR, Miller VS, et al. Neuroanatomy of holoprosencephaly as predictor of function: beyond the face predicting the brain. *Neurology* 2002;59:1058–1066.

From the Department of Pediatrics (K.A., R.R.), Division of Neonatology, and Department of Radiodiagnosis (A.A.), All India Institute of Medical Sciences, New Delhi, India.

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

Neurology®

Teaching *NeuroImages*: Fused brain: Does face predict the brain?

Kamaldeep Arora, Rashmi Ranian Das and Arundeeep Arora

Neurology 2012;79:e201

DOI 10.1212/WNL.0b013e3182768a0f

This information is current as of December 3, 2012

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/79/23/e201.full
References	This article cites 2 articles, 1 of which you can access for free at: http://n.neurology.org/content/79/23/e201.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): Clinical neurology examination http://n.neurology.org/cgi/collection/clinical_neurology_examination MRI http://n.neurology.org/cgi/collection/mri Neonatal http://n.neurology.org/cgi/collection/neonatal
Permissions & Licensing	Information about reproducing this article in parts (figures,tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2012 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.