

# Corpus callosum hypogenesis versus dysgenesis

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When the normal developmental process of the corpus callosum is disturbed, it may be completely absent or partially formed (hypogenetic) (Fig. 1). When it is hypogenetic, the anterior portion (posterior genu and anterior body) will be formed, but the posterior portion (posterior body and splenium) will not. One exception to this largely anterior-to-posterior formation sequence is holoprosencephaly. The callosal anomalies seen in holoprosencephaly represent true callosal dysgenesis (defective development) (Fig. 2) rather than the more common callosal hypogenesis (incomplete formation). In holoprosencephaly the defect in the corpus callosum is seen anteriorly rather than posteriorly.<sup>1</sup>

1. Barkovich AJ. *Pediatric Neuroimaging*, 3rd ed. Philadelphia: Lippencott Williams & Wilkins, 2000: 254-255, 323-327.



Fig. 2. Defective development (dysgenesis) of the corpus callosum in a patient with lobar holoprosencephaly.



Fig. 1. Incomplete formation (hypogenesis) of the corpus callosum.