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## **Asymptomatic Interhypothalamic Adhesions in Children**

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## Asymptomatic Interhypothalamic Adhesions in Children

**W**e have several comments regarding the article “Asymptomatic Interhypothalamic Adhesions in Children.”<sup>1</sup> We agree with the main message of the article: Referable hypothalamic–pituitary axis symptoms are rare in patients with interhypothalamic adhesions. However, because symptoms can be present on occasion, it is prudent to exclude endocrinopathy on clinical grounds. We have encountered a few cases of patients with interhypothalamic adhesions and pituitary axis disturbances, one associated with Kallmann syndrome<sup>2</sup>; 2 with septo-optic dysplasia; and 1, with abnormal weight gain.

We agree with the authors’ theory that interhypothalamic adhesions may be the result of “incomplete hypothalamic cleavage, failed apoptosis, or abnormal neuronal migration” and acknowledge the association with “gray matter heterotopia.” Therefore, additional midline abnormalities would be expected. However, the authors did not identify additional abnormalities in most patients. Nonetheless, concurrent gray matter heterotopia was present in 40%, a considerably large percentage of patients, and they proposed that heterotopia associated with interhypothalamic adhesions may be part of an unknown genetic disorder.

All portions of the brain, including the midline, must be carefully examined in patients with interhypothalamic adhesions because they represent a potential marker for brain malformation. Additional midline anomalies/abnormalities are quite common in our experience.<sup>2–4</sup> These may be subtle and insignificant (hypoplasia of the falx, underrotated hippocampi, and so forth) or obvious and potentially of great consequence (malformations of

brain development).<sup>2–4</sup> Indeed, review of Fig 1 demonstrates subtle midline anomalies not mentioned in the article, including hypogenesis or volume loss of the splenium (Figs 1A and E) and a partially fenestrated, persistent cavum septum pellucidum (Fig 1D).<sup>1</sup> In normal brains, the callosal splenium is typically equal to or larger in caliber than the genu. While a cavum septum pellucidum is a normal variation, it is uncommon in the general population beyond the neonatal period.

We strongly believe that the midline should be closely scrutinized for additional anomalies/abnormalities in patients with an interhypothalamic adhesion. Only after the brain has been carefully examined and signs/symptoms have been carefully considered can an interhypothalamic adhesion be considered an incidental and isolated finding.

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