Hypopituitarism Caused by Bilateral Internal Carotid Artery Aneurysms with a Carotid-cavernous Fistula

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**Picture 1.** Three-dimensional enhanced CT showing giant bilateral internal carotid artery aneurysms (2 cm×2 cm) (arrows).

**Picture 2.** MRI showing the compression of the pituitary stalk by the giant bilateral internal carotid artery aneurysms (arrow).

**Picture 3.** Enhanced CT scan showing reversed flow in left inferior petrosal vein (arrow) suggesting that the arterialization of the cavernous sinus was a result of a carotid-cavernous fistula.

**Picture 4.** MRI performed in 2002 showing that the patient had these aneurysms for more than 4 years.

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Clinical Picture

An 80-year-old woman was admitted to our hospital because of fatigue and loss of consciousness in October 2006. Three-dimensional enhanced computed tomographic [CT] scan (Picture 1) and magnetic resonance images [MRI] (Picture 2) clearly demonstrated giant bilateral internal carotid artery aneurysms (2 cm×2 cm) projecting into the sellar and suprasellar region. Enhanced CT scan showed abnormal and reversed flow in the left inferior petrosal vein suggesting arterIALIZATION of the cavernous sinus as a result of a carotid-cavernous fistula [CCF] (Picture 3). Endocrine studies revealed hypopituitarism with a moderate increase in the prolactin level, which may be explained by pituitary stalk compression by the giant aneurysms. These aneurysms had been pointed out in 2002 (Picture 4), but considering the risk and benefit, no surgical treatment had been proposed. She showed no remarkable symptoms for 4 years, probably because of the CCF, which may have delayed the expansion of the aneurysms.

References