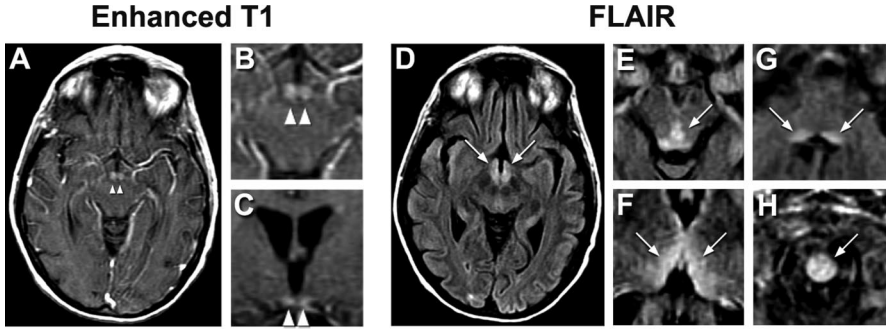

Figure. (A) Gadolinium-enhanced T1-weighted axial MRI shows symmetric enhancement of the mamillary bodies (paired arrowheads). (B) Enlarged axial view of the region of the hypothalamus showing mamillary body enhancement (paired arrowheads). (C) Enlarged coronal view of the mamillary body enhancement (paired arrowheads). (D) FLAIR hyperintensity of the hypothalamus is seen in an axial view (arrows). (E) FLAIR hyperintensity of the periaqueductal gray (arrows). (F) FLAIR hyperintensity of the dorsomedian thalamus (arrows). (G) FLAIR hyperintensity of the floor of the fourth ventricle (arrows). (H) FLAIR hyperintensity is seen throughout the low medulla (arrows).

A clinical and radiographic variant of Wernicke-Korsakoff syndrome in a nonalcoholic patient

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Wernicke-Korsakoff syndrome (WKS) is caused by thiamine deficiency and typically presents with encephalopathy, ataxia, and ophthalmoparesis.

A 57-year-old woman with no history of alcoholism developed abdominal distention over 4 months and an inability to eat. Abdominal/pelvic CT demonstrated a large midline mass. She underwent TAH/BSO with debulking of Stage IV metastatic endometrial adenocarcinoma. Nine days postoperatively she became lethargic and was disoriented and unable to register three objects. There was nystagmus in all directions but no ophthalmoparesis. Twelve hours later she had ophthalmoparesis not overcome by the oculocephalic maneuver. Symmetric limb ataxia and mild weakness progressed to dense quadriparesis.

Head CT showed no abnormalities. Brain MRI showed several characteristic findings of WKS (figure). The whole blood thiamine level was 1.0 μg/dL (normal 1.6 to 4.0 μg/dL).

Following the initial examination, the patient was treated with IV thiamine. Four days later, she was alert and attentive, with normal extraocular movements, no nystagmus or ataxia, and normal strength. Unfortunately, she was left with a Korsakoff's amnestic syndrome.

This case was unusual in that there was dense quadriparesis[1] with central and anterior medullary involvement. This nonalcoholic patient[2] developed WKS from cancer-related malnutrition.

Disclosure: The authors report no conflicts of interest.

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Neurology 2006;67;2015
DOI 10.1212/01.wnl.0000232728.18186.23