Autoimmune atrophic gastritis presenting as myelopathy in a young patient

Mielopatia como apresentação de gastrite atrófica autoimune em um doente jovem

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Conflict of interest: There is no conflict of interest to declare.

Received 30 January 2012; Received in final form 02 March 2012; Accepted 09 March 2012.

Non-traumatic causes of extensive hyperintense spinal cord signal on T2-weighted images include a wide-ranging variety processes, such as tumors and associated disorders, inflammation, infection, vasculopathy, congenital disorders or metabolic diseases [namely vitamin B₁₂ deficiency (VBD)].

We present a 36 year-old male patient complaining from progressive sensory loss on both hands and sensation of chest and abdominal tightness, lasting for five weeks. Neurological examination revealed a mild tetraparesis, glove and sock hyposthesia, C2 to T11 sensory impairment, vibratory anesthesia and proprioceptive errors of lower limbs. Cerebellar tests were normal. Romberg, Babinski and Lhermitte signs were absent. Laboratory tests revealed Hb 14.3 g/dL, mean corpuscular volume 104 fL. Renal and hepatic functions, iron study, copper levels and angiotensin conversion enzyme, and folic acid were normal. Vitamin B₁₂ level was <82 pg/mL (189–883 pg/mL). Serum immunology, virology and bacteriology were negative. CSF study and brain MRI were unremarkable. Cervical spine MRI showed hyperintense spinal cord signal on T2-weighted images affecting mainly dorsal, but also lateral, columns between medulla oblongata and T11 levels, with subtle contrast enhancement (Fig A-C). Basing on clinical and laboratory examinations, the patient was evaluated for extensive myelopathy due to VBD, and it was performed an upper gastrointestinal examination which revealed an atrophic mucosa; histological examination showed chronic atrophic gastritis and intestinal metaplasia, excluding *Helicobacter pylori* infection. Anti-parietal cells were negative, but anti-intrinsic factor antibodies were positive. Treatment was performed with IM cyanocobalamin replacement, 1,000 μg IM daily for a week, then weekly for four weeks and monthly afterwards. Three months later, there was a significant clinical recover, only remaining hypoesthesia of hand fingers. MRI performed at this time showed an exuberant improvement (Fig D).

Subacute combined degeneration (SCD) refers to degeneration of the posterior and sometimes lateral columns of the spinal cord usually as a result of VBD, which effects may not be appreciated until several years, since there is a significant body store of vitamin B₁₂. Its absorption occurs via the ileal microvilli after binding to the intrinsic factor, and malabsorption...
provoked by gastric atrophy is the commonest cause of VBD. Autoimmune atrophic gastritis (AAG) is a special type of gastric atrophy characterized by serum antibodies antiparietal cells and/or anti-intrinsic factor. AAG was an unexpected diagnosis since it is a relatively rare disease and the peak age of onset is 60 years, with only 10% of patients being <40 years of age. Myelopathy alone as clinical presentation is also a rare situation, occurring in about 12% of patients. Concerning on

References

Clinically nonfunctioning pituitary adenoma growth after radiosurgery

Radiosurgery (RS) is a minimally invasive technique suitable for lesions of the central nervous system (CNS), with <3 cm in diameter or volume <30 mL. Benign tumors of the CNS are candidates to perform RS1. It has emerged as a therapeutic option for clinically nonfunctioning pituitary adenomas (CNFPA), associated with effective control of tumor growth and few complications1. About 30% of pituitary adenomas are classified as CNFPA, and patients with this tumor usually have clinical symptoms, such as headaches, visual loss, hypopituitarism and, less commonly, pituitary apoplexy2. These tumors often develop slowly, but diagnosis tends to be late. Surgery is the primary treatment option, preferably transsphenoidal, complemented or not by radiotherapy (RT) or RS1. In cases of tumor residues, the therapeutic approach remains controversial.

Efficacy and safety of RS in CNFPA have not been evaluated as adequately as in functioning pituitary adenomas1. In three series of patients, with a follow-up period longer than 5 years, RS has been effective in the control of tumor growth. However, the long-term efficacy and safety of RS in CNFPA are not fully established.

Fig 1. Before radiosurgery. Cranial nuclear magnetic resonance scan from March, 2004, revealing probable tumor residues, measuring 2.5 x 2.0 x 1.5 cm, with greater involvement of the sphenoid sinus.