PULSE PARA VOLVER AL ÍNDICE

Paresia aislada de la mano secundaria a ictus isquémico en la hand knob area

Isolated hand paresis due to ischemic stroke of the hand knob area

CASE REPORT

A 77-year-old man with past medical history of hypertension, coronary artery disease and hyperlipidemia presented to the emergency department with sudden onset of left-hand weakness for past two hours. Denied any dizziness, loss of consciousness and any weakness or loss of sensation in any other extremity. His vitals at triage were blood pressure 146/91mmHg, heart rate 76 beats per minute, respiratory rate 15 breaths per minute, temperature 36.5°C, oxygen saturation 100% on room air. On neurological examination he was alert and oriented in time, place, and person. His gait and cranial nerves were intact. Motor examination demonstrated weakness of left wrist and fingers extensor muscles with a muscle strength grading of 2 without sensory impairments. Strength and sensation in the other extremities were normal. Other review of systems was normal. Laboratory workup were unremarkable, and electrocardiogram was normal sinus rhythm. Computed tomography (CT) scan of the head was normal at admission (Fig. A and B). However, for suspected peripheral nerve damage also performs cervical CT scan that revealed multiple degenerative changes of the cervical spine. It was observed by neurosurgery that suggested to isolated motor deficit, but clinical picture not compatible with spine-radicular compression. Therefore, has repeated cranial CT scan 12 hours after admission, showing a small cortical hypodensity in the right precentral gyrus (Fig. C and D), the hand motor cortex - "hand knob area". We assumed the diagnostic of ischemic stroke with clinical presentation of isolated hand paresis.

Acute isolated hand or foot paresis is a rare symptom of stroke. It corresponds to less than 1% of all ischemic strokes, and the precentral gyrus, referred to as "hand knob" area, is the most frequent site[1]. Early diagnosis is challenging because the clinical presentation can be confused with peripheral nerve injury[2]. Isolated hand/fingers palsy is not included in the NIHSS because it is a rare type of stroke[3]. The most prevalent risk factors are hypertension and atherosclerosis, with embolic aetiology being the most likely underlying pathophysiological mechanism[4].

In conclusion, clinicians should be aware of this clinicopathologic entity and its clinical presentation, particularly when neurological examination reveals an acute, isolated hand palsy without sensory deficit in patients with vascular risk factors.

Fig. A and B: CT head without contrast done at the time of admission shows no ischemic stroke.

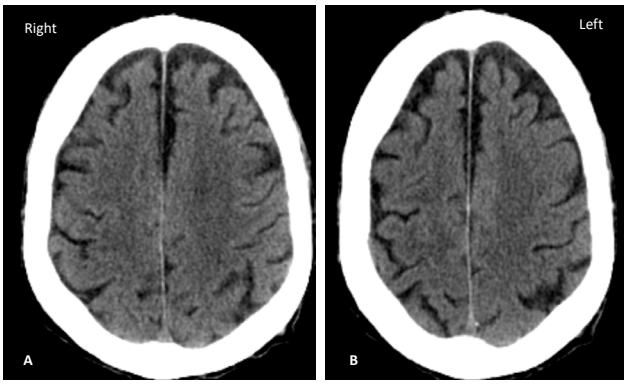
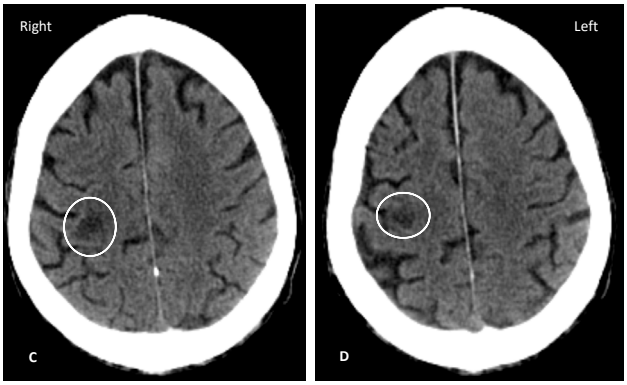


Fig. C and D: CT head without contrast done 12h after admission shows cortical hypodensity in the right precentral gyrus.



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Palabras clave: ictus, monoparesia aislada, hand knob, corteza motora de la mano.

Keywords: stroke, isolated monoparesis, hand knob, hand motor cortex.

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