Case Reports

Trapezius Contracture and Loss of Strength

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Abstract:

Musculoskeletal pathology is common in primary care, but not always have a trivial origin. According to the symptoms and comorbidities of the patient, these pathologies have to make us think if is possible to be a guiding symptom of a more severe pathology. That is why we present the case of a young woman with cardiovascular risk factors (hypertension, smoking, obesity and sleep apnea-hypopnea syndrome) with pain at left trapezius and motor and sensory clinical alterations in left upper extremity. These comorbidities have in common their relationship with cerebrovascular pathology so, given the concomitant clinical musculoskeletal, we need to suspect this cause, as was in this case.

Keywords: High blood pressure; lacunar stroke; smoke; trapezius contracture

Case report:

Below we will present the case of a 45 year old woman with a history of high blood pressure (HBP), obesity, obstructive sleep apnea- hypopnea syndrome (OSAHS) and a 1 pack a day smoker being treated with bisoprolol 2.5 mg, candesartan 32 mg, and furosemide 40 mg. Presents a two-day history of left cervical shoulder pain and loss of strength and sensation of numbness in the left arm and poor control of their blood pressure at home coming up to objectify values upto 210/ 90 mmHg.

Pulmonary, cardiac and abdominal clinical examination were normal. Blood pressure values of 180/87 mmHg are objectified. At physicial examination, there was bilateral painful contracture predominantly left trapezius. On neurological examination, sensitivity, cranial nerves and the visual field were normal. The tendon reflexes were present and symmetrical. On examination of the force, presented forces of 3/5 in shoulder girdle, 4/5 in elbow, and 3/5 in hand of left upper extremity. Romberg test was negative and Babinski response was observed on left side.

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Electrographic study showed sinus rhythm with 66 beats per minute along with analytical studies (biochemistry, hematology and coagulation study) without notable alterations. Regarding the motor deficits in the left side of the body a brain CT scan was made; revealing a 7mm diameter hypo density in right corona radiata relative to lacunar stroke (Figure 1).



Fig.-1: *CT* scan of brain showing a 7mm diameter hypo density in right corona radiata relative to lacunar stroke.

Diagnosed with lacunar stroke at right corona radiata, Patient was discharged from the ER following treatment with Clopidogrel 75mg, Rosuvastatin 10mg, 10mg Amlodipine, and Telmisartan/hydrochlorothiazid 40/12.5 mg with advices for BP control, and Neurology and Rehabilitation follow-ups.

Discussion:

This is a young patient with multiple cardiovascular risk factors (HBP, obesity, OSAHS and smoking) that tells a symptomatology, in the first instance, it could be interpreted as banal (left trapeze pain in context of possible contracture) but with a good clinical interview and a guided exploration may lead to the suspected diagnosis more serious given the symptoms of loss of strength and sensory disturbances leading to exclude a possible stroke.

HBP, smoking, obesity and OSAHS are well known risk factors for cerebrovascular disease. About 10% of transient ischemic attacks (TIAs) occur in people between 18 and 45 years old¹ and with higher incidence in patients with modifiable risk factors such as dyslipidemia, hypertension, diabetes mellitus and smoking.^{2, 3} They appear in the literature few series of cases that deal with stroke in young patients but, nevertheless, include some series of cases where objective that less than 10% of cardiovascular accidents in this age group were due to problems derivatives of these risk factors such as atherosclerosis and small vessel disease. Due to that, is suggested make more study about what kind of cardiovascular risk factors needs to be treated more profusely at this subpopulation to prevent a possible stroke.² Several studies talk about other possible causes in this age group like alcohol consumption,⁴ migraine with aura⁵ and lack of sleep.⁶ Moreover, within the traditional risk factors, it has been observed that obesity is a major risk factor in women compared to men in this age group.⁷

In response to our case, various studies on the incidence of stroke in relation to these risk factors, hypertension, smoking and obesity occupy 3 of the first 4 places (the fourth would be the diabetes mellitus, which the patient does not suffered).^{2,3} OSAHS is particularly important because not assessed systematically in the studies but has been direct link between this disease and the risk of stroke by acting independently of other risk factors.⁸

Improving lifestyle and prevention of risk factors is vital in preventing stroke at any age but more so in young adults because their presence increases the relative risk of developing this disease as to develop throughout his life other diseases caused by these risk factors.⁹ That is why we must make special emphasis on the treatment of these diseases as well as to understand that complications arising from it, such as stroke, may occur at any age. Due to that, is neccesary always appreciate it as a possible differential diagnosis in risk population. This is important to establish treatment and try to avoid the health, social and economic complications derived from this disease in the population affected.

Conflict of interest: None

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