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Case Report

Two Sewing Needles in the Brain: A Case Report

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Abstract

Brain foreign bodies and penetrating missile injuries of the brain are familiar topics for Iranian physicians, especially after Iran and Iraq war. But it's not easily plausible that there is a couple of sewing needles in the cranium of a patient who has not any history of head trauma or penetrating injury. The patient was a 42-year-old man who admitted in neurology ward of Mottahari Hospital in Urmia city with a complaint of headache. Brain computed tomography revealed some hyperdense foci with artifact shadows adjacent to them in frontoparietal region of the brain. Skull plain radiography indicated two sewing needles in his cranium. Probably these needles were inserted in cranial fossa at infancy when the fontanels were steel patent.

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Introduction

Metallic intracranial foreign bodies and related conditions such as brain wound,[1] post-traumatic epilepsy,[2] and post-traumatic nervous instability,[3,4] are rare but described as common war injuries as we saw many cases during the Iran-Irag war. Other cause of metallic foreign body in brain are criminal assaults and industrial.[5] But here we present a patient without any history of attendance in war or penetrating head trauma who called on a physician only for a simple headache and radiographies demonstrated the presence of two sewing needles in his cranium.

Case Presentation

The patient was a 42-year-old man who had noted a progressive distressing headache for four months. Except for headache he was well until admission. The headache was squeezing, sometimes throbbing, located on the vertex and especially recently it was accompanied by nausea and rarely vomiting. There were not other symptoms such as paresis, seizure, decreased level of consciousness, etc. His family history was not significant for any disease. He was smoker but not drug abuser or alcoholic. There was not any information about his vaccination and developmental pattern.

In his history, he was born in a crowded rural and low socioeconomic family under care of his stepmother until the age of 10.

On admission his vital signs were normal. Physical examination of head and neck, chest, abdomen and extremities was also normal. The indices of mental status examination was completely normal. The margin of optic disc was sharp and venous pulsation was visible. Other cranial nerves were normal too. The rest of neurological exams were normal except for a questionable positive Babinski sign on the left.

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Due to his alarming history, axial brain computed tomograph was performed. On tomography, skull bone, brain parenchyma and ventricles was normal but a few hyperdense foci with linear artifacts next to them were noted in the parasagittal frontoparietal region (figure 1).

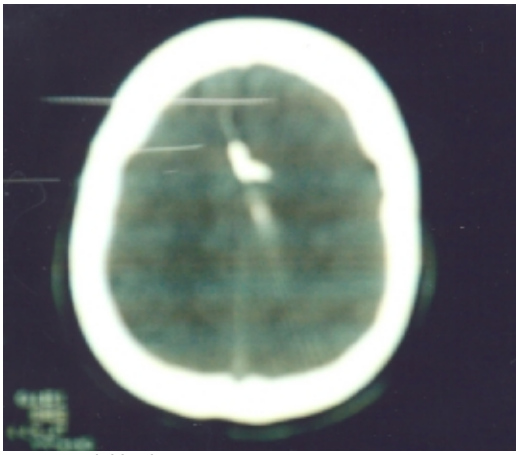

Figure1: Axial brain tomogram.

This appearance was similar to that named as missile brain. But there was neither history of attendance in war field nor evidence of bone defect in the skull or entry path of a missile fragment. A plain skull radiography was done and surprisingly we confronted two sewing needles that crossed each other with the length of 49mm and diameter of about 1mm in the midline of frontoparietal region of cranium (figure 2).

Figure 2: Plain skull radiography.

Discussion

Metalic intracranial foreign body may lead to some complications such as meningitis,[6] focal neurological deficit, hydrocephalus,[6] post-traumatic epilepsy,[7] and vascular aneurysms.[6] Confrontation with two sewing needles in the cranium of a patient without any history of penetrating head trauma is surprising and it seems that he is a victim of child abuse. So due to rarity of this condition, taking a decision about treatment protocol may not be easy.[3] In any case as there was no sign of neurologic of deficit or CNS infection and seizure we planned a conservative management with a low dose of corticosteroid and NSAID that fortunately it was effective. Tow years follow-up of the patient showed no abnormal finding and now he is well.

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