MAN OF 81 YEARS OLD WITH SUBACUTE INSTALLED PARAPARESIS

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ABSTRACT

Total medullar syndrome section has multiple causes including the most common are trauma with or without bone involvement, spinal tumors, myelitis and ischemia. At various stages of clinical presentation are written plus some features of each etiology in part. Differential diagnosis often requires additional investigation and interdisciplinary consultation that could be a major emergency.

Key words: total spinal cord section syndrome, spinal tumor, dissection of the aorta

CASE PRESENTATION

GD, male, aged 81 years old, smoker for 50 years, with essential hypertension stage II with antihypertensive treatment, is hospitalized for crural limb motor deficit associated with astazoabazie, sensitivity problems with the T6 level and sudden sphincter incontinence in about 24 hours ago, low grade fever, weight loss, chest pain, cough with muco-purulent sputum, and marked physical fatigue.

Patient suffering began some eight months ago, when after a trauma patient has left chest pain, accentuated the movement of the chest, dry cough, low grade fever and weight loss with worsening while insidiously installed.

A month ago, the patient has limb crural motor deficit that causes a sudden drop at the same level. Symptoms remitted in approximately 24 hours without residual motor deficit to exist. After two weeks the patient presents motor deficiency of crural limbs with astazoabazie and fall from the same level. The motor deficits ameliorates next hours with orthostatic regaining but persists the gait disorders and causes the patient presenting to the emergency room. It is admitted with a diagnosis of stroke of spinal cord following intravenous treatment with anticoagulants within 7 days. The chest X-ray examination (Fig. 1) emphasize the mediobasale left lung opacity with irregular outline presenting a transparent center relatively well marked, triggering of mediastinum to the left and involvement the left chest pleura.

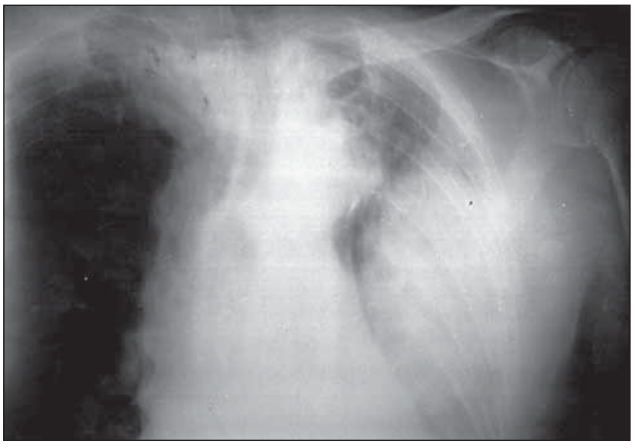

Figure 1

MRI examination of the lumbo-sacral spine is normal. Under treatment of the patient outcome is stationary in the sense that it does not change the neurological deficits. The patient has external with the diagnosis of disabling stroke spinal cord and to investigate the pulmonary syndrome. Follow out-

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patient treatment with antibiotics, analgesics and NSAIDs for 7 days. Ambulatory patient's general condition worsens, so that the patient presents to neurological emergency room.

The general clinical examination highlight: feverish mediocre general condition, underweight, conscious, pale skin, dehydrated, pale mucous membranes, dried, friable nails, underrepresented adipose subcutaneous-tissue, pain in lower spine motility with decrease of joints mobilizing, chest cifotic, decreased breathe ribs, abolished in hemichest left vocal vibrations, dullness in the left hemichest vesicular murmur abolished in left hemichest, FR = 25 breaths / minute; BP = 140/70mmHg, AV = 80bpm, rhythmic sounds, heart murmurs without cardiac and arterial breath, permeable peripheral artery, no other changes in general clinical examination.

The neurological examination highlight: spastic paraplegia, marked ROT, bilateral crural limb, bilateral Babinski sign, anesthesia for all types of T6 sensitivity level, sphincter incontinence, temporospatially oriented.

ECG: sinus rhythm, AV = 85bpm, QRS axis = 0, flattened T waves predominantly in the anterior-lateral territory.

Chest CT: opacity inhomogeneous, bounded imprecise occupying much of the upper lobe and lower lobe with extension to the pleura and rib T4-T6 vertebral corpus, which shows the central hydroexcavators with aeric level and extension to the anterior segmental bronchus left upper lobar, basal left pleural effusion (fig. 2 and 3).

Thoracic spine MRI examination: destruction of the vertebral body and intervertebral disc fragments at T4-T6 in the spine and spinal cord compression at this level, dissecting aneurysm of the thoracic aorta below, with approximate dimensions of 7cm/4cm without arterial branch dissection associated involved segment with thrombus in the aneurysm lumen.

CT brain: mild cortical atrophy with lacunars stroke and hyperdensity limestone in wall of the internal carotid artery's intracarvenous segment (Fig. 4).

EEG Exam: hipovoltat route.

Blood tests: WBC at 12.4 x 10^3 / mm^3, neutrophils at 10.2 x 10^3 / mm^3, Hb 10.2 g / dl, Ht 30.6%, ESR 34 mm/1h, total cholesterol 245 mg / dl, triglycerides 183 mg / dl.

Bronchoscopy: Extrinsic obstruction of the anterior segmental bronchus with hyperemic mucous membrane.

Cytological examination of bronchial aspiration: nonspecific cytology.

Sputum Examination: oral candidiasis.

POSITIVE DIAGNOSIS

Total medullary section syndrome due to tumor section with subacute spinal cord compression by vertebral fragments in the spinal canal. Were needed consulting in pneumology, thoracic surgery, cardiovascular surgery, neurosurgery, anesthesia and intensive care and oncology clinics to elucidate diagnostic and therapeutic conduct.

It concludes that the patient has an increased risk of damage due to surgical anesthesia and respiratory function and possible associated malignancies.

DIFFERENTIAL DIAGNOSIS

1. The spinal cord infarction due to:
- damage arteries by embols detached from the bone marrow plaque or compression by the vertebral disc and the fragments, by systemic lupus erythematosus, granulomatosis;
- Infringement of the medullary arteries, acute aortic dissection or dissecting aortic aneurysm;
- Spinal-artery embolism from atherosclerotic plaques of different causes arthritis or cardiac embolism;
- Spine injury;

The spinal cord ischemia cause total medullary section syndrom shall emphasize the MRI exam medullary infarct area at that level that explains the neurological symptoms and signs.

2. Injury of the spine with spinal cord injury at that level. The patient has a history of spine trauma with damage soft tissue, vertebral body and intervertebral disc and spinal cord with acute neurological disfunction setting. The imaging tests highlight the trauma lisions and emphasize the potential damage to nerve tissue.

3. Vertebral disc protrusion with spinal disc disease in the spine and spinal cord compression.

Sudden onset of neurological deficit and imaging examinations discopathy emphasize the spinal cord and the existing conflict.

4. Acute transverse myelitis due to infection, caused by vasculitis, postinfection, post-vaccination or demyelinating disease, granulomatous myelitis, Behcet's disease.

Initially, pain occurs frequently in the form of belts, and para-or tetraparesis often worsening ini-

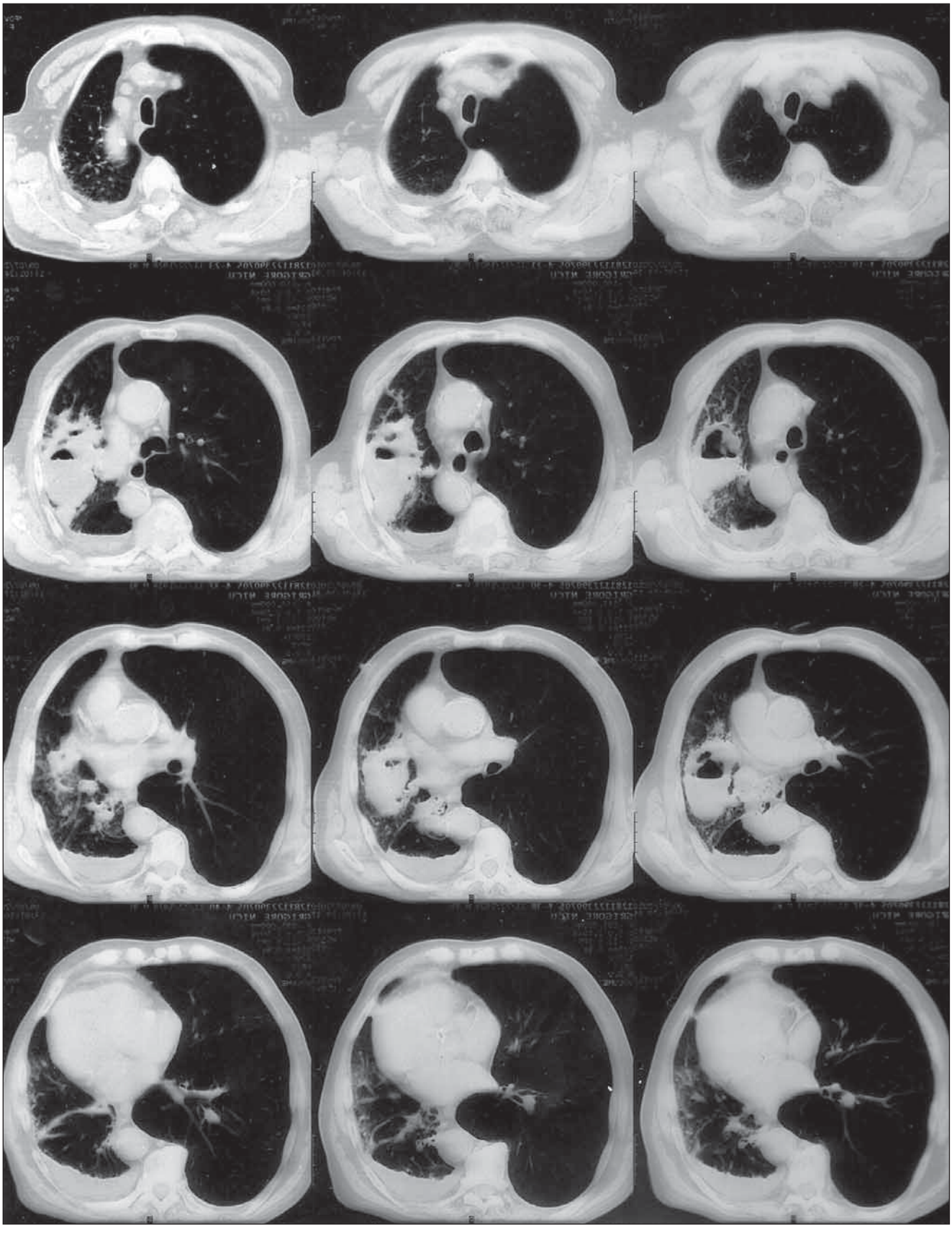

Figure 2

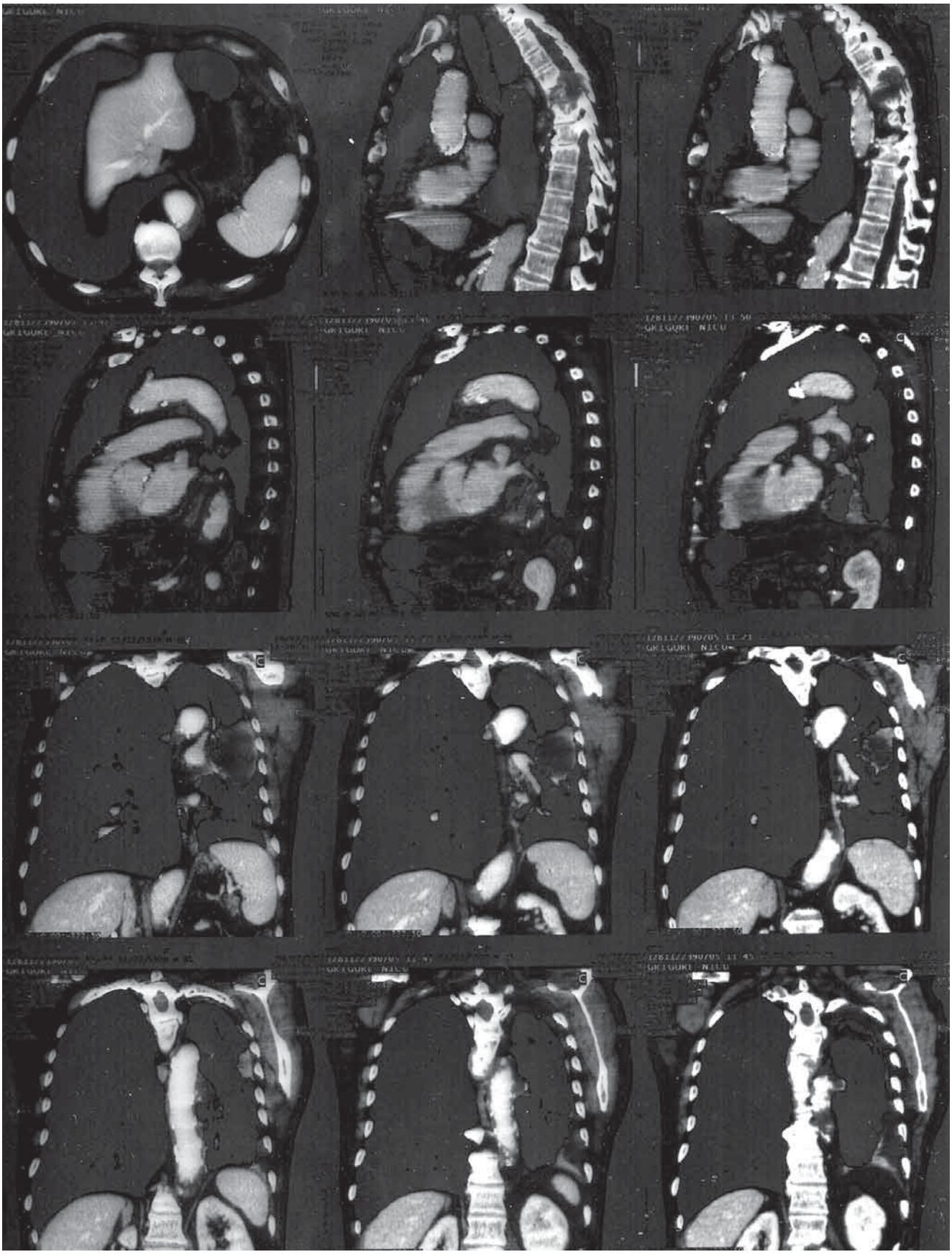

Figure 3

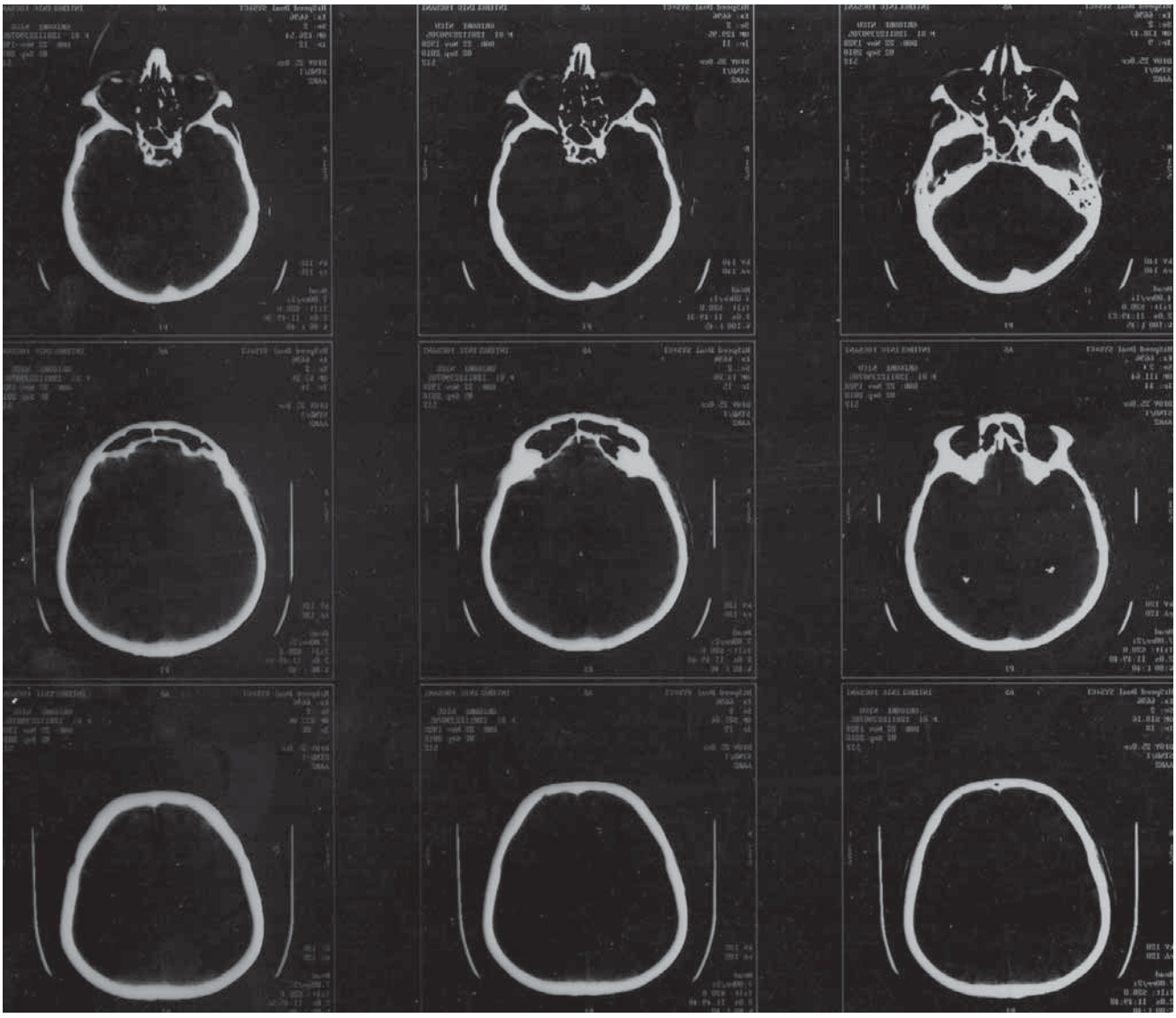

Figure 4

tially hypotonic, followed by spasticity, reflexes abolished, type transverse sensitivity problems, hiposensation pains in the extremities, bladder and rectal disturbances sphicters. MRI examination to exclude inflammatory outbreaks emphasize the spinal cord compression.

5. Process paraneoplazic with necrotizing myelopathy.

Medical history and physical examination can highlight other sites paraneoplazic syndrome and neurological exam and imaging emphasize the medullary lesion.

COMPLICATIONS

Impaired spinal cord section with the full syndrome is due to invasion of the vertebral body and intervertebral disc by the probable origin of the lung.

Fragments detached from the vertebrae and intervertebral discs in the spine with producing migrant subacute neurological symptoms. Because the patient can not undergo surgery, it decides to transfer pulmonology clinic for investigation and specialized treatment.

It can reach the late stage in which the sublesion spinal cord loses irreversible any capacity. Secondary complications may occur with this hypothesis, bedridden patients to worsen and more pacietului state.

Possible complications due to lung cancer are formidable and often lead to death.

PROGNOSIS

The patient has an influence prognosis on the eventual advanced pulmonary neoplasia and the possible bed rest due to spinal cord damage.

PARTICULARITY OF THE CASE

GD, male, aged 81 years old, smoker for 50 years, with stage II essential hypertension in antihypertensive treatment has multiple cardiovascular risk factors to develop a neurological disorder. The patient has satisfactory living conditions with access to the public health system, without knowing for sure if he went to the family doctor or specialist for periodic assessments required.

After the onset of symptoms in about eight months ago with left chest pain, acute at chest movement, dry cough, low grade fever and weight loss that will install insidious, he not shows the doctor for advice about two weeks ago, when it install permanent neurological deficit. Presentation is in the hospital emergency room of a resident place and is a neurological emergency; the patient was hospitalized with a diagnosis of medullar stroke. Unfortunately, the outcome in the treatment administered is stationary and emphasize the chest x-ray of the pulmonary syndrome that requires further investigations. During the admission is performed MRI examination of the lumbo-sacral spine that not elucidates the cause of neurological deficits, the patient was discharged yet with a recommendation to outpatient treatment with antibiotics, analgesics and NSAIDs for 7 days. Ambulatory patient's general condition worsens, and therapeutic and investigative resources are limited, so that the patient presents to the emergency room of our clinic.

The history and clinical examination conducted show the complexity of the case, then the patient is consulted in interdisciplinary clinics: pulmonology, thoracic surgery, cardiovascular surgery, neurosurgery, anesthesia and intensive care and oncology and subjected to complex imaging, laboratory and anatomic-pathological investigations. Positive and differential diagnosis requires a complicated algorithm and requires a relatively short time working; the patient is presenting a serious condition and needing an emergency therapeutic attitude.

Often in medical practice, the patient is presented in a serious condition with some signs and symptoms and in these conditions is self-evident recognition of major immediate life-threatening situations. Identification of critical risk arise from consideration of differential diagnosis based on laboratory investigations and efficiency of therapy administered. The assessment highlights the need to investigate the differential diagnosis and treatment of cardiovascular diseases. In this regard it is necessary to exclude the diagnosis of aortic dissection in this patient with multiple risk factors for cardio-vascular, neurological deficit and sudden moderate to severe pain occurred concurrently. In 40% of cases of proximal aortic dissection appear neurological signs and symptoms, the most common being loss of consciousness and paresis. It is more important to distinguish between a ischemia motor deficit caused by the mechanism for thrombo-embolic and artery lumen obstruction caused by enlarged dissecting fold, because the treatment is completely different. If the mechanism for thrombo-embolic ischemia are administered anticoagulant and fibrinolytic therapy, if aortic dissection extending from the spinal cord arteries such treatment is prohibited. Balance of probability is leaning considerably to one of the diagnoses presented if we provide a quality imaging. In our case the patient is hospitalized with a diagnosis of medullary vascular accident and treated with low molecular weight heparin.

The patient shows an increased surgical and anesthesia risk of damage due to respiratory function and possible associated malignancies. Given the severity of positive diagnosis and limited therapeutic resources, probability of sever prognosis and a formidable complications is great. To improve the general condition will continue the medical treatment of pulmonary disease considered most likely to be the one that caused the clinical picture. At least for this stage the surgery is excluded, the risks are too high.

As an overview we can say this is a case of extreme gravity that has reached the specialty clinical stage complications and the curative treatment penalties may no longer be applied.

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