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Imágenes Médicas

Extramedullary plasmocytoma in diabetic patient with multiple myeloma

Plasmocitoma extramedular en paciente diabética con mieloma múltiple

Plasmocytome extramédullaire chez un patient diabétique avec myélome multiple

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Rayos x de cráneo

ABSTRACT

Extramedullary plasmacytomas represent 3% of plasma cell neoplasms. Their most frequent locations are the gastrointestinal and upper respiratory tract. Bone radiographs were positive, showing multiple osteolytic lesions throughout the bone skeleton. The patient died during chemotherapy treatment. The images presented correspond to a skull tomography with axial, sagittal and three-dimensional (3D) reconstruction in a female patient with multiple myeloma and extramedullary plasmacytoma.

Keys words: Extramedullary plasmocytoma, multiple myeloma, osseous lytic lesion

RESUMEN

Los plasmocitomas extramedulares representan el 3% de las neoplasias de células plasmáticas. Sus localizaciones más frecuentes son el tracto gastrointestinal y respiratorio superior. Las radiografías óseas realizadas fueron positivas, observándose múltiples lesiones osteolíticas en todo el esqueleto óseo. La paciente falleció durante el tratamiento con quimioterapia. Las imágenes que se presentan corresponden a una tomografía de cráneo con vistas: axial, sagital y reconstrucción tridimensional (3D) en una paciente femenina

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con mieloma múltiple y plasmocitoma extramedular.

Palabras clave: plasmocitoma extramedular, mieloma múltiple, lesiones osteolíticas.

RÉSUMÉ

Les plasmocytomes extramédullaires représentent 3 % des néoplasmes plasmocytaires. Leurs localisations les plus fréquentes sont le tube digestif et les voies respiratoires supérieures. Les radiographies osseuses réalisées étaient positives, elle montre de multiples lésions ostéolytiques sur l'ensemble du squelette osseux. Le patient est décédé au cours d'un traitement de chimiothérapie. Les images présentées correspondent à une tomographie crânienne avec reconstruction axiale, sagittale et tridimensionnelle (3D) chez une patiente atteinte de myélome multiple et de plasmocytome extramédullaire.

Mots clés: Plasmocytome extramédullaire, myélome multiple, lésion lytique osseuse

IMAGE EXHIBITION

Below are classic images in a 68-year-old type-2 diabetic patient, with symptoms of severe headache, poor general condition, and loss of appetite. He was treated at the Tharaka Nithi County Reference Hospital, Kenya on 07/10/2022. An X-ray of the thorax and skull was performed, showing widening of the mediastinum and multiple osteolytic lesions in the bones of the thorax and skull.

Computed axial tomography of the skull, administering intravenous contrast (urografin), revealed a tumor image in the frontal region. In the bone tissue and soft tissue biopsy of the frontal region, the presence of conglomerates of plasma cells was confirmed by CD20+CD138 immunohistochemistry.

Tumor cells positive for lambda light chains but negative for kappa chains were stained, confirming the diagnosis of extramedullary plasmacytoma. Multiple myeloma was ruled out by tumor markers such as serum protein electrophoresis, showing a monoclonal peak; serum IgG with levels of 1963 mg/dl; high blood glucose levels at the beginning, but the insulin dose was readjusted, favoring good metabolic control; normal blood cell count and creatinine.

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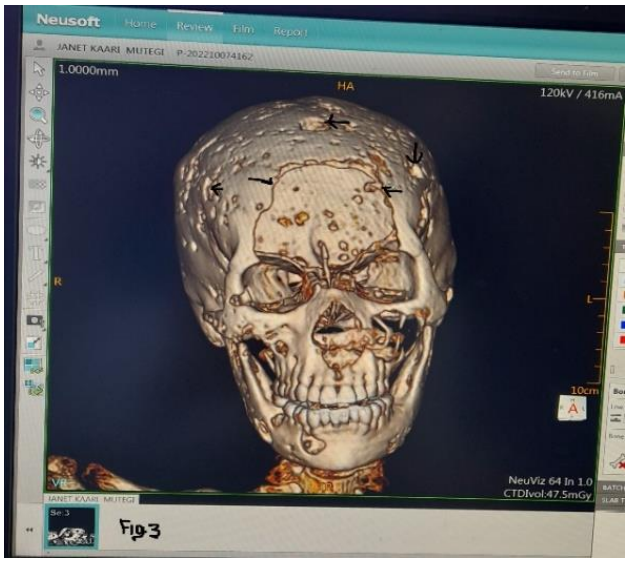

Figure 1. Three-Dimensional View (3D)

Figure 3. Axial view

Figure 2. Three-Dimensional View (3D))

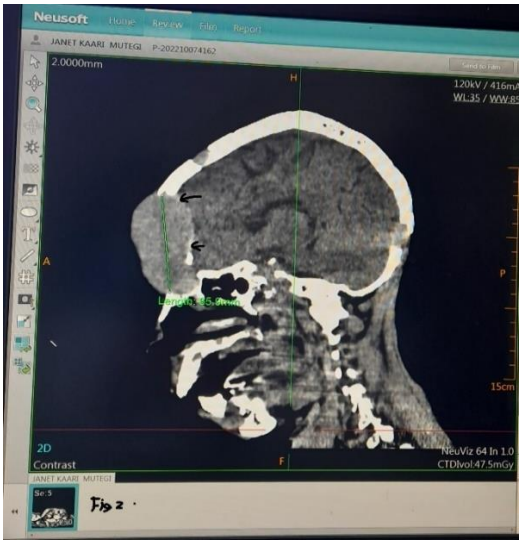

Figure 4. Sagittal view

Figures 1 and 2, three-dimensional (3D) view, show multiple erosive and lytic bone lesions (black arrows) distributed throughout the calvarium and cervical spine, with an extensive area of frontal bone destruction (figure 1, frontal black arrow); secondary to hyperdense mass with soft tissue density (figures 3 and 4, region underlined with black arrow); and homogeneous enhancement to the intravenous 58HU contrast medium, which causes massive destruction of the frontal bone with

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infiltration of the frontal cerebral lobe and multiple lytic lesions at the level of the diploe (figure 3, 3D view), associated with extramedullary plasmacytoma and multiple myeloma.

FINANCING

No funding was received for the development of this study.

CONFLICTS OF INTEREST

No conflicts of interest are declared.

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To the editorial committee of the Journal of Medical Sciences and Life

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