Pneumócefalo Hipertensivo Agudo Exuberante

Massive Acute Tension Pneumocephalus

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Palavras-chave: Lesões Encefálicas; Pneumocéfalo.

Keywords: *Brain Injuries; Pneumocephalus.*

An 86-year-old man was admitted in the emergency room for depressed mental status. He had a Glasgow coma scale (GCS) of 11 points (E4V2M5) and a wound in his frontal region. No other neurological signs were found neither any active haemorrhage. He had normal vital signs. The circumstances were unclear, but he apparently was attacked by his mule. Head computed tomography (CT) showed a large extra-axial pneumocephalus, with signs of tension pneumocephalus (TP) (Fig. 1). The patient was immediately transferred to Neurosurgery (inter-hospital transfer), but due to his comorbidities a conservative approach was rendered with continuous oxygen for 5 days, leading to reduction of the intracranial air. The patient developed fever and was treated with antibiotics and antipyretics, but he never improved to a GCS of 15 points and he died after three weeks.

Pneumocephalus occurs when air is present within the intracranial cavity and commonly it is a complication of surgery, trauma, infection or neoplasms.[1-3] TP develops when intracranial air causes mass effect on the brain,[1-4] and the classic "Mount Fuji sign" and the "air bubble sign" are vital to the diagnosis and to differentiate simple from TP. Pneumocephalus may be seen in 7%-9% of head injuries, and although the precise incidence of TP in those is not known with certainty, a recent review had pointed out to be less than 1%.[3] Thereby traumatic TP is rare and is mostly associated with severe craniofacial fractures,[2,3] as opposed to our patient (Fig. 2). We considered the publication of this images because the identification of this entity is of the utmost importance to a timely acknowledgment of a serious neurosurgical emergency. ■

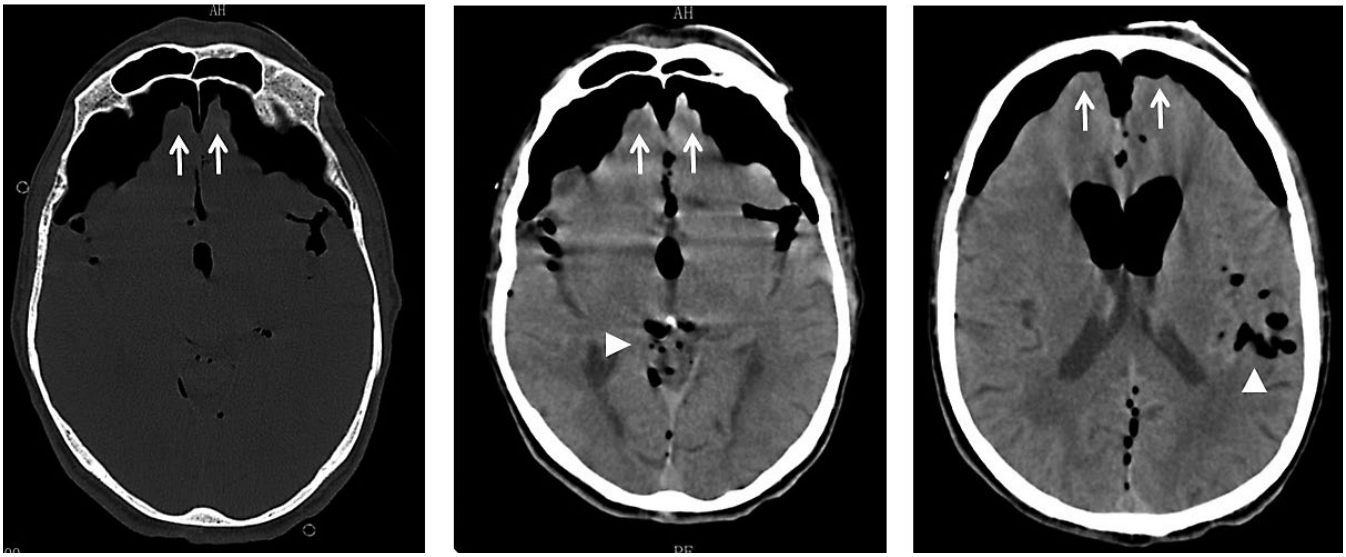

Figure 1: Head CT revealed extensive subdural pneumocephalus bilaterally. The air entrapped causes mass effect, compressing the frontal lobes and widening of the interhemispheric fissure, the "Mount Fuji sign" (arrows). Multiple small foci of air within several cisterns represent the "air bubble sign" (arrowheads). Intraventricular air-fluid level is also present.

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https://revista.spmi.pt - DOI: 10.24950/Imagem/4/20/2/2020

Responsabilidades Éticas

Conflitos de Interesse: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

Fontes de Financiamento: Não existiram fontes externas de financiamento

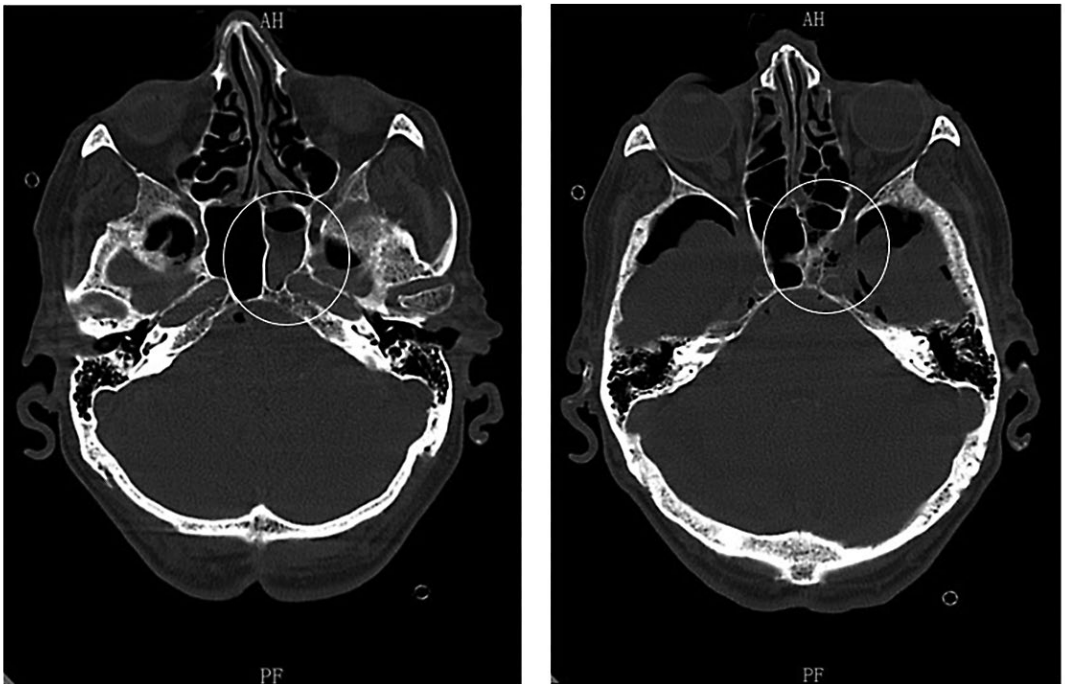

Figure 2: Head CT, bone window. A fracture in the left sphenoidal sinus was suspected by the detection of an air-fluid level, related to left sphenoidal hemossinus (white circles). No other fractures were found.

para a realização deste artigo.
Confidencialidade dos Dados: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.
Proteção de Pessoas e Animais: Os autores declaram que os procedimentos seguidos estavam de acordo com os regulamentos estabelecidos pelos responsáveis da Comissão de Investigação Clínica e Ética e de acordo com a Declaração de Helsínquia da Associação Médica Mundial.
Proveniência e Revisão por Pares: Não comissionado; revisão externa por pares.

Ethical Disclosures

Conflicts of interest: The authors have no conflicts of interest to declare.
Financing Support: This work has not received any contribution, grant or scholarship
Confidentiality of Data: The authors declare that they have followed the protocols of their work center on the publication of data from patients.
Protection of Human and Animal Subjects: The authors declare that the procedures followed were in accordance with the regulations of the relevant clinical research ethics committee and with those of the Code of Ethics of the World Medical Association (Declaration of Helsinki).
Provenance and Peer Review: Not commissioned; externally peer reviewed.

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Received / Recebido: 16/01/2020
Accepted / Aceite: 05/02/2020

Publicado / Published: 27 de Junho de 2020

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