

Invasive aspergillosis of the orbit and cavernous sinus in a patient with Aids

Aspergilose invasiva da órbita e seio cavernoso em paciente com Aids

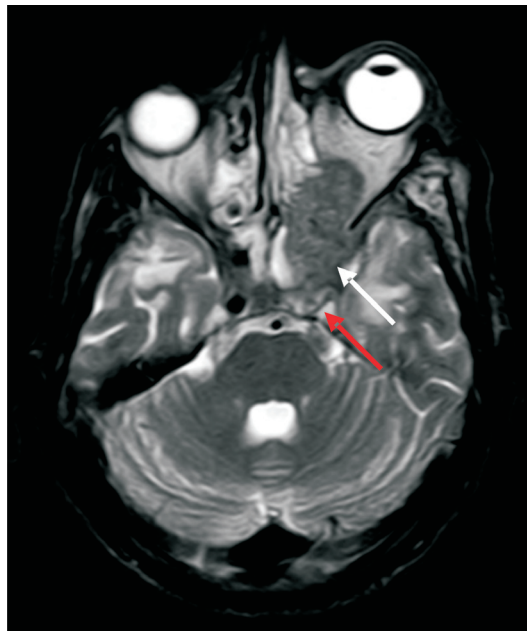
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A 38-year-old man, who had been HIV seropositive for 16 years and had a CD4+ cell count of 39 cells/ μ L, sought care because of a 1-month history of decrease in visual acuity, periorbital swelling, proptosis of the left eye and fever. He had a history of chronic sinusitis for the last 12 months which was repeatedly treated with oral antibiotics (amoxicillin/clavulanate and azitromycin) without significant improvement. Previous related-AIDS diseases included neurotoxoplasmosis, syphilis and CMV retinitis. On clinical examination there was left axial proptosis; ocular motility was restricted in the left eye (**Figure A**). Orbital and sinuses computed tomography scan showed left maxillary sinus opacification, bone destruction of the orbital floor and extension to intraorbital soft tissues (**Figure B**). Magnetic resonance of the brain (T_2 -weighted) showed a hypointense lesion involving the left orbit and invading the cavernous sinus and the left internal carotid artery (**Figure C**). The patient was submitted to craniotomy with a presumptive diagnosis of retroorbital bacterial or fungal abscess and during surgery the diagnosis of fungal infection was confirmed. Culture of the surgical samples grew *Aspergillus fumigatus*. He was treated with liposomal amphotericin B and after diagnosis received voriconazole (400mg, p.o., daily) without improvement. Exenteration of the left eye and left maxillary surgical debridement was cogitated but the procedure was discarded due to the carotid artery invasion by the fungal infection. After 45 days the patient was dismissed from hospital, attending his wish to go home, and died 10 days later.

O paciente, de 38 anos, HIV positivo havia 16 anos, com contagem de CD4 de 39 cell/ μ L, procurou atendimento devido à febre recorrente, perda da acuidade visual, edema periorbital e proptose do olho esquerdo, há um mês. Apresentava história de sinusite crônica, nos últimos 12 meses, tratada, repetidas vezes, com antibióticos (amoxicilina/clavulanato e azitromicina), sem

melhora significativa. Ele relatou passado de neurotoxoplasmosse, sífilis e retinite por CMV. Ao exame clínico, havia proptose e restrição da motilidade ocular no olho esquerdo (**Figura A**). A tomografia computadorizada de órbita e seios da face revelou opacificação do seio maxilar esquerdo, destruição óssea do assoalho da órbita e extensão para tecidos moles intraorbitários (**Figura B** – seta preta: destruição óssea do assoalho da órbita). A ressonância magnética do encéfalo (ponderada em T2) mostrou lesão hipointensa envolvendo a órbita esquerda, invadindo o seio cavernoso e a artéria carótida interna (**Figura C** – seta branca: tecido hipointenso; seta vermelha: artéria carótida interna colapsada). O paciente foi submetido à craniotomia com o diagnóstico presuntivo de abscesso retro-orbitário bacteriano ou fúngico; durante a cirurgia, a infecção fúngica foi confirmada; identificou-se *Aspergillus fumigatus* na cultura das amostras cirúrgicas. Ele foi tratado com anfotericina B lipossomal e, a seguir, recebeu voriconazol (400mg/dia, via oral), sem melhora. A exenteração do globo ocular e o debridamento do seio maxilar esquerdo foram cogitados, mas descartados devido à invasão da carótida interna. Após 45 dias de internação, atendendo ao desejo do paciente, ele recebeu alta hospitalar e morreu dez dias depois.

REFERENCES

1. Johnson TE, Casiano RR, Kronish JW, Tse DT, Meldrum M, Chang W. Sino-orbital aspergillosis in acquired immunodeficiency syndrome. Archives Ophthalmology 117: 57-64, 1999.
2. Lambertucci JR, Rayes AA, Nunes F, Landazuri-Palacios JE, Nobre V. Fever of undetermined origin in patients with the acquired immunodeficiency syndrome in Brazil: report on 55 cases. Revista do Instituto de Medicina Tropical de São Paulo 41: 27-32, 1999.
3. Martinez R, Castro G, Machado AA, Moya MJ. Primary aspergilloma and subacute invasive aspergillosis in two AIDS patients. Revista do Instituto de Medicina Tropical de São Paulo 51: 49-52, 2009.