

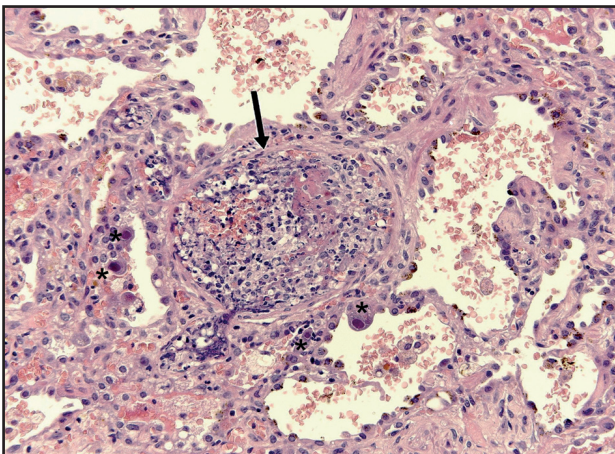
Severe cytomegalic pneumonitis associated with pulmonary aspergillosis in a child with immunosuppression due to chemotherapy for treating pineoblastoma

Grave pneumonite citomegálica associada a aspergilose pulmonar em criança imunossuprimida por quimioterapia usada para tratar pineoblastoma

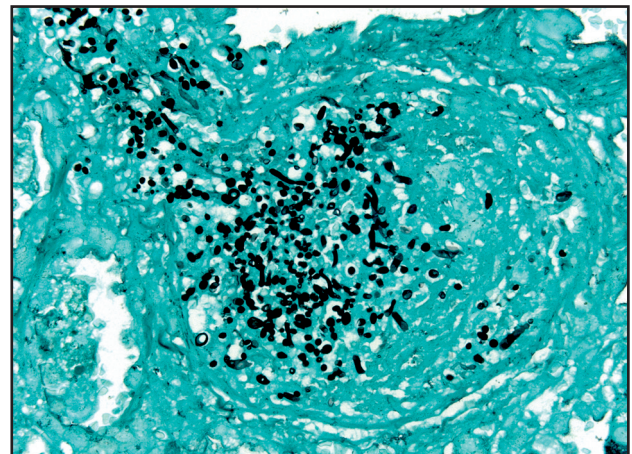
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A seven-year-old girl with pineoblastoma had had it surgically resected followed by chemotherapy (cyclophosphamide and vincristine; 1.5g/m²) along with methylprednisolone pulses. She developed bilateral amaurosis, febrile pancytopenia, recurrent pneumonia, urinary infection and sepsis. During her last hospitalization, she presented respiratory distress with severe dyspnea. She was treated with prednisone, voriconazole, sulfamethoxazole-trimethoprim, vancomycin, metronidazole, ciprofloxacin, meropenem and amphotericin B over the course of 50 days in hospital, with intermittent recoveries. During an episode of worsened dyspnea, she presented shock and was admitted to the Intensive Care Unit. High-resolution computed tomography on the chest showed bronchiectasis and thickening of the intra and interlobular interstices, together with ground-glass opacity and randomly distributed nodules, which suggested acute respiratory distress syndrome associated with fibrosis (**Figure A**). Fine-needle biopsy on the lung (middle lobe of the right lung) showed extensive areas of alveolar epithelial erosion, with numerous intra-alveolar macrophages and pneumocytes containing cytomegalic inclusions (**Figure B**: cells marked with asterisks). Venules (arrow) filled with fibrinous material, cell debris and several large hyphae and fungal spores that stained with silver (Grocott staining) could be seen. These histological findings suggested *Aspergillus* infection (**Figure C**: detail of the same venule), which was later confirmed by blood culturing. Following this anatomopathological diagnosis, the patient was treated with ganciclovir and conventional amphotericin B. There was an improvement in the patient's general condition and she was discharged from the Intensive Care Unit. Viral infections should be investigated in immunosuppressed patients, especially after ruling out bacterial and fungal infections.

Criança de sete anos, sexo feminino, com pineoblastoma ressecado cirurgicamente seguido de quimioterapia (ciclofosfamida e vincristina – 1,5g/m²) além de pulsos de metilprednisolona. Evoluiu com amaurose bilateral, pancitopenia febril, recorrentes

pneumonias, infecção urinária e sepses. Na última internação, apresentou quadro pulmonar exuberante com dispnéia intensa. Foi tratada com prednisona, voriconazol, sulfametoxazol-trimetoprim, vancomicina, metronidazol, ciprofloxacino, meropenem, anfotericina B ao longo de 50 dias de internação apresentando melhoras intermitentes. Durante recrudescimento do quadro de dispnéia, apresentou choque sendo a paciente internada em Centro de Terapia Intensiva. A tomografia de tórax de alta resolução mostrou bronquiectasia e espessamento dos interstícios intra e interlobular, associado a vidro fosco e nódulos de distribuição randômica, sendo sugestivo de síndrome do desconforto respiratório agudo com fibrose associada (**Figura A**). A biópsia por agulha fina do pulmão (lobo médio do pulmão direito) revelou extensas áreas de desnudamento do revestimento alveolar, com numerosos macrófagos intra-alveolares e pneumócitos contendo inclusões citomegálicas (**Figura B**: células marcadas com asterisco). Presença de vênulas (seta) preenchida material fibrinoso, debris celulares e numerosas hifas largas e esporos fúngicos corados pela prata (Grocott), sugerindo infecção por *Aspergillus* à histologia (**Figura C**: detalhe da mesma vênula), confirmando-se o diagnóstico pela hemocultura. Após diagnóstico anatomopatológico, foi tratada com ganciclovir e anfotericina B convencional obtendo melhora do quadro geral e alta do Centro de Terapia Intensiva. Infecções virais devem ser investigadas em pacientes imunossuprimidos, especialmente depois de excluídas infecções bacterianas e fúngicas.

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