

# Fungal sinusitis caused by aspergillus in a patient with type 1 diabetes

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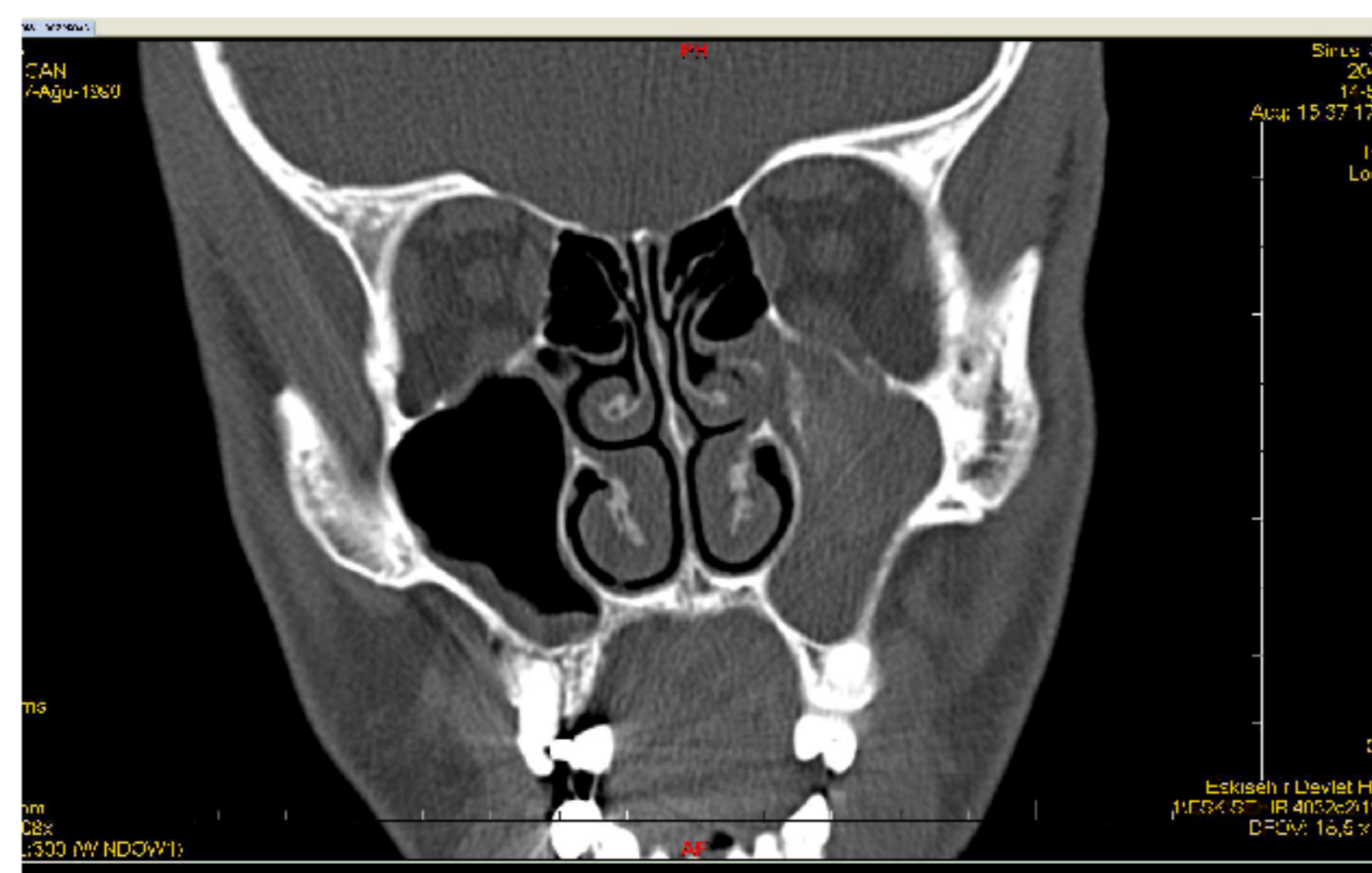
## OBJECTIVE

Aspergillosis is defined as the infection of the aspergillus type mold and is commonly seen in hematologic malignancies, hematopoietic stem cell transplantation, aplastic anemia, primary immunodeficiency and immunocompromised patients. Fungal sinusitis in diabetes mellitus is generally presented as rhinoorbitocerebral involvement of mucormycosis. Here in, a fungal sinusitis caused by aspergillus case presented with headache is reported.

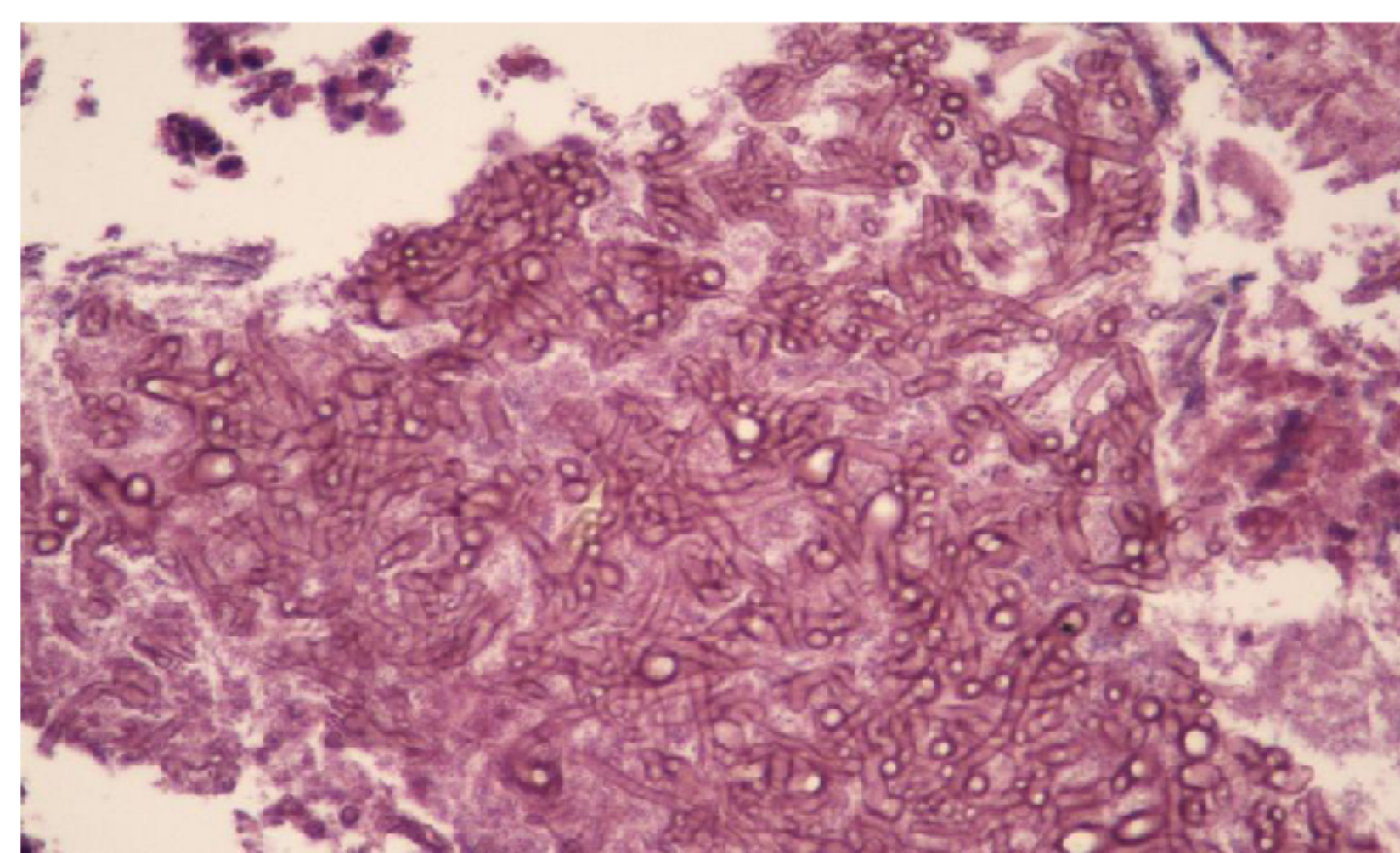
## CASE

Twenty three year old male with a history of 9 year diabetes was admitted to our clinic because of high blood glucose level (with a HbA1C level of 14%) and headache which was lasting for 1 month without any pain relieve. Cerebral computerized tomography was performed and hyper dens foci fulfilling left maxillary sinus was found(Picture 1). Fungal sinusitis was firstly thought. Tissue sampling from the foci was performed by Ear-Nose-Throat specialist by using endoscopic method. There was no reproduction of any organism in culture but aspergillus hif structure was seen in biopsy sample(Picture 2). Bone destruction or orbital involvement wasn't seen according to radiological findings. Patient was diagnosed as fungal sinusitis. He was empirically treated with itraconazole. His tomography 3 month after the initiation of therapy and there was no sinusitis finding.

Picture 1:



Picture2:



## DISCUSSION

Rhinocerebral aspergillosis is commonly seen in neutropenic patients whereas mucormycosis is more frequent in diabetic patients. Aspergillosis is detected in a diabetic patient who did not have an additional risk factor. Fungus can colonize in upper and lower airways without causing infection. Only culture positivity is not enough for diagnosis. Invasive fungal sinusitis is diagnosed with the histopathologic evaluation of the biopsy material. Invasive fungal sinusitis is commonly seen in immunosuppressive patients and can cause life threatening conditions. In patients with uncontrolled diabetes and ketoacidosis, invasive fungal sinusitis can be seen.

## CONCLUSION

Although the most common cause of fungal sinusitis in diabetic patients is mucormycos, aspergillus must be kept in mind.

