Clinical History:

A 40-year-old man had a nasofrontal mass for several years. This mass became painful, with an inflammatory aspect for few weeks.

Imaging Findings:

A 40-year-old man had a nasofrontal mass for several years. This mass became painful, with an inflammatory aspect for few weeks. Physical examination results were normal. His medical history was unremarkable, and there was no pertinent family history. Ultrasound examinations, computed tomography and MRI examinations were performed.

Discussion:

The most common of congenital midline masses are dermoid/epidermoid tumors, nasal gliomas and nasal encephaloceles. They are probably due to incomplete regression of embryonic dural diverticula in the nasofrontal region. Encephalocele result from herniation of intracranial tissue into the dural projection through the foramen caecum. MR imaging shows a mass contiguous with the brain with the same signal characteristics. Nasal gliomas are encephaloceles in which the connection to the brain has partially or completely sealed off. The incomplete regression of the embryonic nasofrontal diverticula with trapping of nonglial tissue result in nasal dermoid sinus and nasal dermoid/epidermoid cyst. The masses are located in the subcutaneous fat of nose. The masses are low attenuation on CT and with short T1, T2 (dermoid cyst) or long T1, T2 (epidermoid) relaxation time. In this case, the Sagittal T2-weighted image of the patient show a discreetly heterogenous hyperintense mass, different from brain signal, the diagnosis of encephalocele or glioma can be excluded. The most probable diagnosis is dermoid or epidermoid cyst. Nasal dermoid cyst appear sporadically in the general population with a male predominance. The dermal sinuses could be infected and this infection is the reason for presentation. The infection is usually superficial like this case where dermal sinus are not present. Previous report, indicate that nasal dermoid cyst are frequently associated with intracranial extension. In this case, there is no connection of the lesion with intracranial structure probably because the prenasal space and the foramen cecum become obliterated until few years into postnatal life.

Differential Diagnosis List: Nasal dermoid cyst

Final Diagnosis: Nasal dermoid cyst
References:

Description: Nasofrontal inflammatory mass Origin:
**Description:** Sagittal ultrasound image. Show echogenic mass with posterior reinforcement.

**Origin:**

**Description:** Axial ultrasound image. Show echogenic mass with posterior reinforcement.

**Origin:**
Figure 3

Description: Axial image from CT scan showing a round isodense mass in the midline. Origin:
**Description:** Sagittal T1-weighted image shows a small mass, well circumscribed, hypointense compared with brain, adjacent to nasal cartilage.

**Origin:**
Description: Saggital T2-weighted image Show a discretely heterogenous hyperintense mass Origin:

Description: Saggital gadolinium-enhanced image Show enhancement in the border of the well circumscribed mass Origin:
Description: The incomplete regression of the embryonic nasofrontal diverticula with trapping of nonglial tissue result in nasal dermoid sinus and nasal dermoid/epidermoid cyst. Origin: