ABSTRACT

Objectives: Pott’s puffy tumor or chronic frontal sinusitis with osteomyelitis is an infrequent complication of parasanal sinus osteoma. Gardner’s syndrome is an autosomal dominant disorder related to osteomas, intestinal polyposis, and various soft tissue tumors. The risk of developing colon cancer in this disorder is nearly 100%. We describe the presentation and management of the first reported case of Pott’s puffy tumor associated with Gardner’s syndrome.

Methods: Physical examination findings, photographic and radiographic images, and operating room (OR) endoscopic findings, along with management of this unique entity are described. Additionally, a review of the literature highlighting trends in presentation and management of osteoma-induced sinusitis is provided.

Results: A 15-year-old otherwise healthy male presented with acute exacerbation of a chronic frontal sinusitis with orbital and frontal cellulitis. This was associated with multiple parasanal sinus osteomas related Gardner’s syndrome. The patient underwent endoscopic frontal sinusotomy, frontal osteomas related Gardner’s syndrome, and right maxillary sinusitis. This was associated with osteomas related Gardner’s syndrome.

General asymptomatic, and incidentally detected on routine imaging.

Gardner’s syndrome is an autosomal dominant disorder, genetically indistinguishable from familial adenomatous polyposis (FAP).

Clinical triad of intestinal polyposis, osteomas, and cutaneous and soft tissue tumors

Risk of colon cancer approaches 100%.

We describe the first reported case of Pott’s puffy tumor associated with Gardner’s syndrome.

CASE REPORT

12-year-old African American male with progressively growing and painful jaw masses.

Imaging showed multiple impacted and supernumerary teeth.

Radiopaque lesions in frontal and ethmoid confirmed to be osteomas after endoscopic biopsies.

Referral to gastroenterology with genetic testing and endoscopy confirming Gardner’s syndrome.

One year later sinus osteomas appeared unchanged.

Lost to follow up and eventually presented with acute periorbital swelling and facial pressure.

Repeat CT with expansion of sinus osteoma with bony erosion (Figure 1).

Resolved with broad spectrum antibiotics, nasal decongestants, and irrigation.

Once again lost to follow up presented one month later with one week of right forehead swelling and tenderness.

CT scan (Figure 2) with frontoethmoid osteoma along with bilateral frontal sinuses, right ethmoid sinuses, right maxillary sinuses, and right frontal subperiosteal collection.

OR for endoscopic removal of frontoethmoid osteoma, total ethmoidectomy, maxillary antrostomy, and endoscopic sinusotomy.

Removal of bony tumor and re-establishment of frontal outflow patency achieved with drill.

External incision and drainage of the subperiosteal abscess

Remained symptom free for the past year.

REFERENCES


