Peer Review File

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Reviewer A

Comment 1:

Procedures like ethmoidectomy are routinely performed with an endoscope, and treatment/removal of lesions in the ethmoid sinus are commonly treated by endoscopic sinus surgery. Moreover, almost 500 cases of juvenile ossifying fibromas of the jaws and paranasal sinuses were reported in the literature, according to a literature review cited by the authors. This same review identified cases of JOF in the paranasal sinuses that recurred as long as after 192 months of the treatment, and the case presented by the authors was followed up for only 36 months. Furthermore, the case was not "successfully treated by endoscopic sinus surgery" as stated, as the patient had to go through a second, revision surgery. Therefore, I don't see how this case can possibly contribute to the field.

Reply 1:

"Procedures like ethmoidectomy are routinely performed with an endoscope, and treatment/removal of lesions in the ethmoid sinus are commonly treated by endoscopic sinus surgery": this is obviously true, but it is *obvious* for inflammatory diseases of paranasal sinus, such as chronic rhinosinusitis with (CRSwNP), or without (CRSsNP) nasal polyps. These are frequent pathologies in children and adult, and the procedure performed is usually anatomically conservative and called "functional endoscopic sinus surgery" (FESS). Other less frequent indications for nasal endoscopic surgery are primary nasal and paranasal tumors, such as squamous cell carcinomas, adenocarcinomas, and other rarer malignancies. These malignancies, mainly diagnosed in adulthood, frequently necessitate a more demolitive surgical approach, and *not always functional* structures can be preserved, so surgeons called it "endoscopic sinus surgery" (ESS). Combined open (craniofacial) and ESS approach may be necessary for malignant, large tumors.
The case we reported is about a rare pediatric benign tumor, the juvenile ossifying fibroma (JOF) of ethmoid sinus, for which nasal endoscopic management *is a challenging, and not so obvious* treatment. In fact, endoscopy is still considered "successful in some endonasal cases" (https://doi.org/10.5114/pjp.2021.111779), but fortunately applied in recent case presentations. (https://doi.org/10.1097/SCS.0000000000004510) As already happened for nasal and paranasal malignancies, endoscopic surgery has gained increasing indications in JOF, and combined

techniques (open and endoscopic surgery), or adjuvant chemotherapies (e.g., interferon alpha therapy, https://doi.org/10.1016/j.joms.2008.05.169) can be associated to guarantee tumor eradication even in large masses. Real time CT navigation equipment, which will be available soon in our hospital, can be used to guide surgeons in much safe and effective endoscopic procedures. (https://doi.org/10.1097/SCS.0000000000004510)

About the frequency of cases, a recent systematic review reported 143 cases of paranasal JOF, and a *total 491* cases of maxilla/mandible, *and* paranasal JOF. (https://doi.org/10.1016/j.ijom.2019.06.029) We assume that 143 is not a so high number of cases, and sharing case reports in this field is fundamental to compare different experiences.

About the follow-up period, we apologize for not having specified that our patient is still continuing the follow-up. We added this information at the end of the case report description.

Finally, we reply to the statement "Furthermore, the case was not *successfully treated by endoscopic sinus surgery* as stated, as the patient had to go through a second, revision surgery": we tried a conservative approach with the first endoscopic removal, however a recurrence occurred, as it occurs in 27.8-56% of cases reported in the already cited SR. (https://doi.org/10.1016/j.ijom.2019.06.029, https://doi.org/10.5114/pjp.2021.111779) We did not consider a revision endoscopic surgery a failure, considering the behavior of this pathology. We consider a success having obtained a complete removal after two endoscopic procedures, without any anatomical and functional damage of the important structures surrounding the lesion in our young patient.

For all the reasons mentioned above, we believe that our case report about paranasal JPOF have contributed to the international literature in this field.

Changes in the text 1:

We added some new data about the number of cases and the recurrence rate reported in recent literature (see the introduction section, Page 2, Lines 39-41 and Lines 46-47, the modified text is in red; see also reference number 3 in the references section, Page 7, Lines 156-158).

We added information about the follow-up of the patient (see the case description section, Page 4, Lines 96-97, the modified text is in red).

Finally, we added some data about CT-assisted endoscopic surgery in the discussion (see the discussion section, Page 5, Lines 126-127, the modified text is in red).

Reviewer B

We thank so much Reviewer B for the interesting suggestions, because these have improved the quality of our work. Our changes based on the Reviewer B's suggestions are reported below, point by point.

Comment 2:

1. Entity

A. Which type of JOF is it? JPOF or JTOF. Of course, it is indicated in line 56, but you should highlight it in the title and the abstract.

Reply 2:

We thank you Reviewer B for this specification. We added the subtype "psammomatoid" of the juvenile ossifying fibroma (JOF) both in the title and in the abstract, as correctly suggested.

Changes in the text 2:

We have modified the title and the abstract as advised (see Title, Page 1, Line 1; see Abstract section, Page 1, Lines 17-18, the modified text is in red).

Comment 3:

2. Introduction

A. Line 36 (So far, 144 cases of paranasal JOF have been reported) - reference is required

Reply 3:

A.Statistical data was checked using a recent systematic review (SR) about this topic, and the reference https://doi.org/10.1016/j.ijom.2019.06.029 has clearly cited in the new version of our manuscript.

Changes in the text 3:

We have modified our text as advised (see Introduction section, Page 2, Line 39-41, the modified text is in red; see also reference number 5 in the references section, Page 7, Lines 156-158).

Comment 4:

3. Case presentation

A. You mentioned fused ossicles forming trabeculae, which is seen in JPOF, but it is not the origin of its name. I suggest mentioning psammoma-like bodies in the main text, not only in the

description of the Figure 2. Moreover, they are not psammoma-bodies, they resemble them only, therefore they are called psammoma-like bodies (https://doi.org/10.5114/pjp.2021.111779)

B. Some immunostaining was performed?

C. You mentioned MRI, but you did not mention if it revealed some relevant data.

Reply 4:

A. As the Reviewer suggested, we mentioned "psammoma-like bodies" in the main text, and we specified it also in the description of the Figure 2.

B. Immunostaining was not performed by our pathologists.

C. The Reviewer B correctly invited us to specify how MRI has helped to exclude possible intracranial or ocular complications, also because the patient had a cranial trauma.

Changes in the text 4:

A. We have specified the histological characteristics of different types of JOF (see Introduction section, Page 2, Lines 35-39, the modified text is in red). We described histological features and mentioned the "psammoma-like bodies" in the case description section, as suggested (see Case presentation section, Page 3, Lines 71-74, the modified text is in red). We changed "psammomatoid bodies" in "psammoma-like bodies" also in Figure 2's description, as suggested (see Figure 2' description, Page 9, Lines 216-222, modified text in red).

B. No changes in the text were done for this comment.

C. We added data about MRI in our case presentation, as suggested (see Case presentation section, Page 3, Lines 64-65, the modified text is in red).

Comment 5:

4. Figure 2

A. Each part of the figure should be indicated and described distinctly (e.g. Figure 2: A, B, C)

B. Magnification and staining should be indicated.

Reply 5:

A, and B. We apologize for not having clearly described the Figure 2, and the other figures too. In the revised manuscript, each part of the Figure 2 has been indicated "A, B, and C", described distinctly basing on magnification and content. Staining has been indicated for each one.

Changes in the text 5:

A, and B. We added some data in the description of Figure 2, as suggested (see Figure 2' description, Page 9, Lines 203-209, modified text in red).

Comment 6:

5. Figure 1 and 3: What is the difference between them?

Reply 6:

We better clarified the description of Figure 1, in the case description section as well as in the figure's description. We wrote a better description also of Figure 3 and Figure 4. We thank the reviewer for this suggestion because a better-quality figure's description was needed for publishing our manuscript.

Changes in the text 6:

We added some data about CT in the main text as well as in the Figure's description (see the case presentation section, Page 3, Lines 60-62; see also the new description of the figures 1, 3 and 4: Pages 8-9, Lines 196-200; Page 9-10, Lines 214-217; Pages 10, Lines 220-224; the modified text is in red).

Comment 7:

6. All figures: A. All the images are published with the patient's parental consent - it is not required. ("Where illustrations include recognizable individuals, living or deceased, great care must be taken to ensure that consent for publication has been given" - Guidelines for Authors)

Reply 7:

We wrote this sentence in order to clarify patient's parental consent to publish this case report and the images. It was an excessive zeal. The reviewer correctly suggest that this sentence is not required because the patient is not recognizable in the figures.

Changes in the text 7:

The words "All the images are published with the patient's parental consent" are strikethrough, in red (see Page 11, Line 226).

Comment 8

7. Discussion

A. Differential diagnosis should be discussed - not only fibrous dysplasia, but also osteoblastoma, osteosarcoma, primary aneurysmal bone cyst. Intraosseous cavernous hemangioma and eosinophilic granuloma (https://doi.org/10.5114/pjp.2021.111779)

B. Line 116-118: Check also - https://doi.org/10.1016/j.joms.2008.05.169

Reply 8

A. We considered other differential diagnosis (osteoblastoma, osteosarcoma, primary aneurysmal bone cyst, intraosseous cavernous hemangioma, and eosinophilic granuloma) in our discussion and we thank the Revisor for this important suggestion. We also added important information about clinical signs and symptoms in the Introduction section.

B. We modified the discussion about the interferon alpha therapy and consider the reference suggested in our revised manuscript.

Changes in the text 8:

A. We added other possible differential diagnosis in the discussion section, as suggested (see Page 5, Lines 114-117, the modified text is in red). Furthermore, we added new data about clinical manifestation (see the introduction section, Page 2, Lines 42-45, the modified text is in red).

B. We modified the statement about the interferon alpha therapy (see the Discussion section, Page 6, Lines 137-139 the modified text is in red). We added a new sentence to conclude the last paragraph of our discussion (see Page 5, Line 145-148, the modified text is in red).

Comment 9

8. References

A. The article is well documented, but I recommend to cite some newer (mentioned above)

Reply 9

We cited all the new references mentioned by the Revisor B.

Changes in the text 9:

We added the reference https://doi.org/10.5114/pjp.2021.111779 , as suggested (see reference number 4, Page 2, Line 43; see also references section, Page 7, Lines 158-159).

Finally, we added the reference https://doi.org/10.1016/j.joms.2008.05.169, as suggested (see reference number 20, Page 6 , Line 139; see also references section, Page 8, Lines 191-192).