
Peer Review File

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First Round

Reviewer A	
Comment 1	<p>The title would benefit from some changes. Post-complication observations only lasted a few months, and while the neurological symptoms decreased, did not disappear completely. Of course, we hope that the patients have made a full recovery, but this is not known from the article.</p> <p>I therefore propose to include the term "short-term observations" in the title: the term "long-term" seems inappropriate</p>
Reply 1	<p>The title has been changed to fit the comment.</p> <p>As the comment referred, we have no information about the time lapsed for full recovery. So, the authors preferred to avoid specifying the extent of the complications in the title for a more representable title of the actual cases.</p>
Changes in the text	<p>Title: How much damage could sodium hypochlorite accident cause? case report and review of literature</p>

Comment 2	<p>In the case reports, the authors indicate that the needle was jammed, but do not present a possible cause. Maybe it was the wrong size, or the wrong type of needle? Please include any information about the needles and syringes used during the described procedures in the "case reports" section.</p> <p>Please expand the Discussion to include a description of the methods used for "safe rinsing of root canals".</p> <p>In addition, in the Discussion, please indicate which needles and syringes are recommended when rinsing root canals.</p> <p>Please also describe the correct irrigation technique, for example, to what depth should the needle be inserted, and what movements should be made with the needle/syringe to avoid jamming the needle in the canal.</p>
Reply 2	<p>In page 8 line 232 in discussion, it was stated that the authors were among the management team to whom the patients were referred after the accident occurred. So, the exact circumstances of the accident and the gauge of the needles are among the missing data to the management team.</p> <p>The discussion section was expanded regarding the “safe rinsing topic” as requested.</p>

<p>Changes in the text</p>	<p>Page 8, line 232</p> <p>Unfortunately, the cases –presented in this report- are reported by the post-accident management team, rather than the dentists who were performing the endodontic treatment. Therefore, the detailed information about the procedure, the equipment used and immediate management is lacking. However, the cases were managed afterwards following the proposed guidelines (23).</p> <p>Page 7 line 208</p> <p>Classically, the irrigant is delivered inside the root canals using a syringe and a needle. (20) This technique is named as traditional needle irrigation. (19) The needle should be small sized; optimally 30-gauge. (20) For safe irrigation, the needle should be 1-2 mm short of the working length. This is meant to keep the balance between flushing the canal as close to the apical foramen as possible on one side and preventing the irrigant’s extrusion on the other side.(21) It should also be moved in and out while dispensing the irrigant to allow for the outflow of the debris, continuous refreshment of the canal and prevent the needle’s locking in the canal.(18) Other safer equipment include side-vented needles, EndoActivator, ultrasonic devices and Vibringer; among others. (20)</p>
<p>Comment 3</p>	<p>Please indicate the recommended concentrations of sodium hypochlorite for rinsing root canals.</p>
<p>Reply 3</p>	<p>The requested information has been added.</p>
<p>Changes in the text</p>	<p>Page 7 line 204</p> <p>The effective concentration of NaOCl irrigant ranges between 0.5% to 5.25%. (18) However, the optimal concentration has not reached consensus yet. (19) In all the presented cases, NaOCl concentration was not higher than the effective range (3%). So, the concentration did not contribute in the causes of the accidents.</p>
<p>Comment 4</p>	<p>Did the patients consent to the treatment and to the publication of their cases in the journal?</p>
<p>Reply 4</p>	<p>The statement of patients’ consents is written within the ethical statement in the footnote.</p>

<p>Changes in the text</p>	<p>Footnote (3) page 10:</p> <p>Ethical statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.</p> <p>In all the presented cases, the condition and its treatment plan were discussed in detail with the patients. After obtaining informed consents for the management and the publication in each case, the patients were managed in accordance with the ethical standards of ethics committee of the institute where the cases were examined and managed; and with the Declaration of Helsinki and its amendments. A copy of the written consent is available for review by the editorial office of this journal.</p>
<p>Comment 5</p>	<p>I recommend supplementing the Discussion with more articles on complications after root canal irrigation with sodium hypochlorite</p>
<p>Reply 5</p>	<p>More case reports have been cited as requested.</p>
<p>Changes in the text</p>	<p>Page 6 line 175</p> <p>Sodium hypochlorite accidents present in the form of severe instantaneous pain. Afterwards, the symptoms differ greatly from one accident to another. Most cases have no further symptoms (3), while others manifest as extraoral swelling caused by emphysema and ecchymosis of the face (4–13). Less commonly reported sequelae include sensory and/or motor deficits (4,6,13) and intraoral soft tissue necrosis (12,14–16).</p>

Reviewer B	
Comment 1	<p>Case report 1</p> <p>77- Periapical radiograph of the affected premolar showed intact roots with slight widening of the periodontal membrane space periapically. 79 (Figure 1).</p> <p>Where is the periapical radiograph made and diagnosed located? In figure 1, there are only intraoral photos.</p>
Reply 1	<p>The citation of (Figure 1) was referring to the data mentioned in the whole paragraph. Due to the restriction of the number of figures allowed for case reports in the journal's guidelines, the authors selected the most representative 8 pictures to include in the manuscript. So, the radiograph was omitted from the figures.</p> <p>But it is now added as (Figure 1D) as per requested.</p>
Changes in the text	<p>Figure 1D is added among the figures; and its caption added in the legends section: Page 14. Line 378</p>
Comment 2	<p>81- tissues; and irrigated by saline followed by applying a Eugenol-containing dressing in the ulcer (Figure82 1B)</p> <p>Why was applied a Eugenol-containing dressing in the ulcer? Explain why and refer through articles to the technique applied for cleaning.</p>
Reply 2	<p>Information about the use of Eugenol-containing dressing was added as requested.</p>
Changes in the text	<p>Page 8 line 249:</p> <p>Topical ointments and dressing are also recommended according to the case. (24) Dressing materials are commonly applied to intraoral wounds to promote healing and prevent infection. (25) Among the types of dressings available in</p>

	market, Eugenol-containing dressings provide superior results. (26) In the presence of a deep pouch-like ulcer in the vestibule; where food impaction and secondary infection is highly expected, the lesion was packed with a dressing material covered by sterile gauze; just like extraction sockets.
Comment 3	I believe that food entered the patient's surgical wound, was recommend any protocol for cleaning the cavity for patient?
Reply 3	<p>The treatment used started by debridement of the ulcer to remove any debris or necrosis followed by copious saline irrigation of the lesion under local anesthesia. Afterwards, the patient was instructed to keep the lesion clean by regular saline irrigation at home.</p> <p>This information is clarified in the management protocol mentioned in details in case 1.</p> <p>Furthermore, in case 3, the importance of irrigating the lesion and keeping its hygiene was highlighted again and stressed upon. This was the key for treating case 3 as it was primarily complicated due to the secondary infection caused by poor lesion hygiene.</p>
Changes in the text	<p>Page 3: line 72:</p> <p>On the day of presentation, the vestibular perforation was thoroughly debrided to remove the necrotic tissues; and irrigated by saline followed by applying a Eugenol-containing dressing in the ulcer (Figure 1B). For the swelling, Amoxicillin Clavulinate (Augmentin 1 gm, GlaxoSmithKline, UK) was prescribed twice daily for one week; together with applying warm fomentation over the swollen area extraorally three times daily and irrigating the intraoral vestibular perforation by saline at home.</p>
Comment 4	Case report 2- In this case report you need more information about the case report.

Reply 4	<p>The authors were concerned about keeping the word count as low as possible to respect the word limit of the journal clarified in the guidelines. However, details are now added under your request.</p>
Changes in the text	<p>Page 4: line 98:</p> <p>Extraorally, parasthesia in the infraorbital nerve was detected with no other signs of swelling or hematoma. Intraorally, an ovoid deep ulcer of dimensions (19.5 mm width x 9.2 mm height) was found at the buccal vestibule apical to the upper right first premolar. The ulcer had a regular edge, freely moving base and was surrounded by a very thin erythematous halo (Figure 2).</p> <p>Page 4: line 107:</p> <p>The necrotic ulcer had a typical picture of a chemical burn. Therefore, the differential diagnosis included chemical burn due to iatrogenic placement of a chemical irritant in the vestibule. However, direct contact of a chemical to the mucosa would not cause parasthesia to the whole infraorbital branch of the maxillary nerve. Together with the history of acute pain and swelling during that last visit of endodontic treatment, the case was diagnosed as NaOCl accident causing chemical burn to the overlying mucosa and chemical irritation to the infraorbital nerve.</p> <p>Page 4: line 116:</p> <p>The ulcer was debrided under local anaesthesia with copious saline irrigation; followed by dressing application. Post-operative instructions included daily irrigation of the lesion at home using saline with Vitamin B12 and antibiotic prescription.</p>

<p>Comment 5</p>	<p>Case report 3</p> <p>130- What curative protocol was performed on the patient? Explain.</p>
<p>Reply 5</p>	<p>The protocol is mentioned in details in case 1: page 3, line 72.</p> <p>Afterwards, in each case of 2 and 3, the protocol is mentioned again with emphasizing on the main differences from case 1 or the main points added or omitted from the protocol of case 1.</p> <p>In case 3, the details are written in the paragraph in page 5, line 143.</p> <p>The treatment protocol used in the 3 cases was following the guidelines for managing NaOCl accidents (Kanagasingam and Blum 2020) as stated in the discussion section.</p> <p style="text-align: center;"><i>Kanagasingam, Shalini, and Igor R. Blum. 2020. "Sodium Hypochlorite Extrusion Accidents: Management and Medico-Legal Considerations." Primary dental journal 9(4): 59–63.</i></p>
<p>Changes in the text</p>	<p>Page 5: Line 143</p> <p>Therefore, the case was managed as the previous cases through debridement under local anaesthesia and copious irrigation using saline; followed by applying the dressing. After debridement, the roots of the teeth were directly seen in the floor of the ulcer with no overlying bone. Moreover, perforations in the roots were seen showing the color of the gutta-percha. Afterwards, an antibiotic and analgesic were prescribed. And above all, clear post-operative instructions were given to the patient about the repeated daily irrigation.</p>
<p>Comment 6</p>	<p>Figure 3B- Was realized procediment apicectomy surgery? Explain exactly in more detail the protocol followed for the treatment of the case</p>

Reply 6	<p>Figure 3B shows the complete absence of any buccal supporting bone. The roots were easily visualized by the naked eye just below the pseudomembrane. After debridement, the roots were exposed to the oral environment directly without any bony protection and with no mucosal coverage either.</p> <p>With such compromised bone support, beside the perforated roots seen also in the figure, the prognosis of the teeth was not favorable. The prognosis was further questionable especially that the teeth were primarily planned to serve as abutments to an overdenture. This meant they were expected to withstand forces more than the usual forces an individual tooth is supposed to withstand. In addition, with the presence of extreme pain due to secondary infection, no surgical procedure was to be performed until complete healing, resolution of infection and absence of symptoms.</p> <p>Based on all this, once the ulcer was healed and the patient restored her normal masticatory functions, the teeth were assessed as inadequate as abutments and their extraction was mandatory.</p>
Changes in the text	The assessment of the teeth was added as requested in page 6, line 153

Second Round

Re-review comments

Reviewer A

Accept.

The manuscript has been corrected.

Reviewer B

The requested changes have been made as expected. Article accepted for publication

congratulations