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Supernumerary Lateral Incisors: A Narrative Review

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Abstract

Background: Although many papers on the subject of supernumerary teeth are found in the dental literature, the great majority are in the form of case reports and prevalence studies. Of the supernumerary teeth found in the maxillary incisor area, those associated with the mesiodens have received attention and extensive investigation in recent years. The less common supernumerary teeth associated with the lateral incisor appears to have been overlooked and, as far as can be ascertained from the literature, no in-depth reviews of this particular dental anomaly have been undertaken, apart from isolated case reports. **Aim:** This paper reviews the current literature on characteristics, prevalence, diagnosis, and management of this problem. **Materials and Methods:** A thorough literature search between 1974 and 2020 was done using Scopus, PubMed, and Google Scholar databases. Results were reviewed, prioritized, and findings were compiled. The keywords of the search strategy were as follows: prevalence, case reports, supernumerary, supplemental, and lateral incisors. Only articles in English published in peer-reviewed journals were included in the review. This review underlines the fact that a supplemental lateral incisor is a rare developmental anomaly. **Results:** Its prevalence among various populations falls between 0.05% and 1.59%. They occur more frequently in the maxilla than in the mandible, and the majority occur unilaterally, erupted, and of the supplemental type. **Conclusion:** Early diagnosis and treatment are suggested to prevent orthodontic and esthetic complications. Therefore, careful clinical and radiographic examination is essential to make a correct and rational diagnosis and treatment planning for any patient.

Keywords: Hyperdontia, Lateral Incisors, Supernumerary Teeth, Supplemental

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INTRODUCTION

Developmental dental anomalies are marked deviations from the normal presentation of the primary or permanent dentition. These anomalies present variations in the number, morphology, eruption, and size of teeth. Variations in the number of teeth include hypodontia (decreased number of teeth) and hyperdontia (supernumerary teeth).

Supernumerary teeth are extra teeth found in the dental arches in addition to the normal dental series. They can be found in almost any region of the dental arch both in the primary and permanent dentition. Supernumerary teeth may be single or multiple, may be unilateral or bilateral, erupted or impacted, and may affect one or both jaws. Supernumerary teeth are more frequently observed in the permanent dentition than in the deciduous with more frequency for the upper arch than the lower with a strong predilection for the premaxilla.^[1] Supernumerary teeth

can be mainly classified according to their morphology (form) and location in the dental arches.^[2] According to their morphology, supernumeraries may be categorized into two forms: rudimentary and supplemental. Rudimentary (or dysmorphic) defines teeth of abnormal shape and smaller size including conical, tuberculate, and molariform types, whereas supplemental teeth (or eumorphic) are of normal shape and size resembling a particular tooth from the normal dentition. Their position within the jaw varies as they may be placed labially, buccally, or palatally with varying orientations (vertical, horizontal, or inverted).^[3]

Supernumerary teeth associated with the lateral incisor appear to have been overlooked and, as far as can be

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ascertained from the literature, no in-depth reviews of this particular dental anomaly have been undertaken, apart from isolated case reports. This paper reviews the current literature on characteristics, prevalence, diagnosis, and management of this problem.

MATERIALS AND METHODS

A thorough literature search between 1974 and 2020 was done using Scopus, PubMed, and Google Scholar databases with appropriate MeSH headings and keywords related to supplemental and supernumerary lateral incisors. Combinations of the following keywords were used for the identification of the studies to be considered in this review: “Supernumerary,” “supplemental,” “hyperdontia,” “lateral incisors,” “prevalence,” and “case report.” To enrich the results, reference mining of the articles that were identified was used to locate other papers. The process of cross-referencing continued until no new articles were identified. Only articles and case reports in English published in peer-reviewed journals were included in the review. All appropriate patient consent and ethical approval forms were obtained.

RESULTS

Supernumerary lateral incisors occur more frequently in the maxilla than in the mandible,^[4] and the majority occur unilaterally^[1,5-9] [Figure 1], erupted,^[1,5,9-11] and of the supplemental type^[1,5,7,9,12,13] [Figure 2]. Supernumerary lateral incisors are more frequently observed in males.^[1,5,11] Yet, some studies report them more frequently observed in females^[7,10] and sometimes at the same frequency as in males.^[4,6] Supernumerary lateral incisors are smaller than the adjacent normal lateral incisors, whereas the normal lateral incisors adjacent to supernumerary ones are smaller than the contralateral incisors.^[4]



Figure 1: Clinical image showing a maxillary right conical supernumerary lateral incisor

Supernumerary lateral incisors may have a negative influence on the esthetics of the anterior region of the dentition and may disturb the dental arch harmony due to their variable size, shapes. They may cause occlusal anomalies such as excessive overjet, crowding, midline shift, or ectopic eruption.^[4,5,14]

Supplemental lateral incisors are rare; almost all the cases of supernumerary lateral incisors reported in the literature were erupted. However, Hekmatfar *et al.*^[15] reported a case of bilaterally impacted supplemental supernumerary lateral incisor in a 9-year-old male and Andrei *et al.*^[16] reported a case of an impacted unilateral supernumerary lateral incisor in a 5-year-old female. A summary of cases reports on supernumerary lateral incisors is presented in Table 1.

The prevalence of supernumerary lateral incisors has been described in different populations. The reports of these studies have ranged from lower prevalence rates such as 0.05% in an Indian population,^[5] 0.15% in a Palestinian population,^[1] 0.18% in an Iranian population,^[6] 0.27% in a Swedish population,^[10] and 0.3% in a Mexican population^[7] to higher values between 0.5% and 1.59% in Turkish,^[8,9] Nigerian,^[11] as well as Western Romanian^[30] populations. The variations in the prevalence figures might be associated with demographic factors (notably gender and race) and with the different study methodologies and data collection methods used by the investigators.

Supernumerary lateral incisors have been reported as the second most frequently observed supernumeraries. Nevertheless, they have been reported as the third, fourth, and even as the fifth most common supernumeraries. Table 2 summarizes these studies.

DISCUSSION

The etiology of supernumerary teeth is not clearly understood. Several theories have been suggested such as genetics, dichotomy (splitting) of the tooth bud, atavism, and hyperactivity of the dental lamina.



Figure 2: Clinical image showing a maxillary left supplemental supernumerary lateral incisor

The most supported theory is the dental lamina hyperactivity theory, which suggests that supernumerary teeth are formed as a result of local, independent, and conditioned hyperactivity of the dental lamina that develops into an extra tooth bud, which results in a supernumerary tooth.

Supernumerary teeth may occur in the form of a single isolated anomaly or a multiple form. Cases of multiple (five or more) supernumerary teeth not associated with other systemic diseases or syndromes are rare and when present, the most common site affected is the mandibular premolar region.^[36] Most cases of multiple supernumerary teeth are reported to be associated with syndromes such as cleidocranial dysplasia, familial adenomatous polyposis, trichorhinophalangeal syndrome type I, Rubinstein-Taybi syndrome, Nance-Horan syndrome, Opitz G/BBB syndrome, oculofaciocardiodental syndrome, and Robinow syndrome. Yet, other syndromes may have supernumerary teeth among their clinical findings such

as Apert, Crouzon, Kreiborg-Pakistani, Ellisvan Creveld, Goldenhar, and Noonan.^[37]

Usually, it is difficult to distinguish the normal tooth from its fully erupted supplemental twin. Nevertheless, in some cases, a supplemental tooth may show a deep palatal pith and coronal invagination.^[21] Toureno *et al.*^[38] proposed a guideline to locate and identify supernumerary teeth in two and three dimensions, which may reduce treatment errors and improve communication among health care providers and third-party administrators. In cases where the management indicates extraction, it may be difficult to determine which tooth is supplemental and which is the normal dentition. It is wise to extract the tooth which is most displaced from the arch.^[39]

An association between anomalies of the permanent dentition and the presence of dental anomalies in primary teeth has been proposed.^[40] Supplemental lateral incisors in the primary dentition followed by similar anomalies

Table 1: Review reporting the presence of erupted permanent supernumerary lateral incisors

| Author | Year | Age*/sex | Type | Unilateral/bilateral | Chief complaint |
|--|------|----------|---|-----------------------|---|
| Robertson <i>et al.</i> ^[17] | 1983 | 11/F | Supplemental | Bilateral | Crowding in the upper arch |
| Dowling and Delap ^[18] | 1997 | 10/M | Supplemental | Bilateral | Unerrupted maxillary central incisors |
| Lo Giudice <i>et al.</i> ^[19] | 2008 | 10/M | Supplemental | Bilateral | Extra teeth |
| Singla and Negi ^[20] | 2010 | 17/F | Supplemental | Bilateral | Irregularly placed upper front teeth |
| Yildirim and Bayrak ^[21] | 2011 | 8/M | Supplemental | Bilateral | Dental caries |
| Anil ^[22] | 2012 | 12/M | Supplemental | Unilateral/left side | An extra tooth in the palatal side of the upper front jaw |
| Kini <i>et al.</i> ^[23] | 2013 | 21/M | Supplemental | Unilateral/left side | Pain and pus discharge from upper right side |
| Nagpal <i>et al.</i> ^[24] | 2013 | 21/ F | Supplemental | Bilateral | Pain in lower right back tooth region, |
| Bhullar <i>et al.</i> ^[25] | 2014 | 14/F | Supplemental | Bilateral | Spaces between upper teeth |
| Rodrigues <i>et al.</i> ^[26] | 2014 | 45/M | Supplemental | Unilateral/right side | A routine check-up |
| Shinohara <i>et al.</i> ^[27] | 2015 | 32/M | Supplemental | Unilateral/right side | Referred by orthodontist |
| Jana <i>et al.</i> ^[28] | 2017 | 13/M | Right/supplemental left/ fused to lateral | Bilateral | The patient wants to clean his teeth |
| Chalakkal <i>et al.</i> ^[29] | 2018 | 11/M | Supplemental | Bilateral | Anterior crowding |
| Andrei <i>et al.</i> ^[16] | 2019 | 29/M | Supplemental | Unilateral/right side | A fractured amalgam filling on molar |
| | | 8/M | Supplemental | Unilateral/right side | Pain in the lower left side |

*Age in years

Table 2: Frequency of supernumerary later incisors among other supernumeraries

| | Sample size | Subjects with supernumerary teeth | Supernumerary teeth | Supernumerary laterals (%) | Frequency of occurrence among other supernumeraries |
|---|-------------|-----------------------------------|---------------------|----------------------------|---|
| Esenlik <i>et al.</i> ^[9] | 2599 | 69 | 84 | 13 (15.5) | Second |
| Singh <i>et al.</i> ^[31] | 2864 | 46 | 55 | 14 (25.45) | Second |
| Celikoglu <i>et al.</i> ^[32] | 3491 | 42 | 48 | 11 (22.9) | Third |
| Burhan <i>et al.</i> ^[33] | 2753 | 39 | 46 | 12 (26.1) | Third |
| Mossaz <i>et al.</i> ^[34] | N/A* | 82 | 101 | 19 (18.81) | Third |
| Arandi <i>et al.</i> ^[1] | 1970 | 17 | 23 | 4 (17.4) | Fourth |
| Bereket <i>et al.</i> ^[35] | 111,293 | 851 | 1100 | 98 (8.9) | Fourth |
| Khandelwal <i>et al.</i> ^[5] | 9248 | 58 | 82 | 6 (7.31) | Fifth |

*N/A = Not Available

in the permanent dentition have been reported.^[10,12,21,41] Hence, radiographs are recommended where anomalies in the primary dentition are noted to determine the condition and number of permanent teeth. Panoramic radiographs alone are not sufficient to reliably identify supernumerary teeth due to the superimposition of anatomical structures.^[42] An anterior occlusal or periapical radiograph using the paralleling technique should be also prescribed in an attempt to detect the total number of supernumerary teeth, localize the exact position, and thus confirm the diagnosis.^[43] In cases where the surgical removal of impacted supernumerary teeth is warranted, cone-beam computed tomography (CBCT) is advocated.^[16] CBCT has a greater potential than conventional radiography for providing precisely detailed information on developmental anomalies and any associated pathologies and reducing the possibility of surgical errors.^[44,45]

Impacted supernumerary lateral incisors may be detected by clinical examination as a result of a delay in the normal eruption of the permanent adjacent teeth, or in a routine radiographic examination (panoramic or periapical) for orthodontics and treatment planning. Early diagnosis helps to avoid complications, plan for treatment at the appropriate time and in certain instances allow more conservative interventions.^[21,46] Once detected, a decision should be made whether to remove the supernumerary lateral incisor or to leave in place and follow-up. The treatment plan is based on information obtained through radiographs and CBCT; also, it is made taking into account factors, such as the age of the patient, the position of the supernumerary tooth and the consequences that its presence creates on the arch. Hence, the treatment depends on the respective case and their management should be part of a comprehensive treatment plan and should not be considered in isolation. When indicated, early surgical intervention for the removal of an anterior supernumerary tooth, with a cutoff point of 6–7 years, minimizes the associated complications both because of the presence of the supernumerary tooth and the actual surgical procedures.

Studies report successful autotransplantation of supernumerary lateral incisors. Autotransplantation is the transplantation of embedded, impacted, or erupted teeth from one site to another in the same individual to replace missing, defected, or malformed teeth. The recipient site may be either an extraction site or a surgically prepared alveolus. One report documented using a supernumerary maxillary lateral incisor to replace a malformed (fused) maxillary central incisor.^[47] At a 20-year recall examination, normal periradicular appearance and pronounced obliteration of root canal were noted.^[47] Another study reported successful transplantation of a supernumerary supplemental right lateral incisor with complete root formation to replace a permanent lateral

incisor with a poor prognosis on the left side.^[17] At a 16-month review examination, the tooth was still firm, with good color and responded to electric stimulation. Radiographically the tooth had a normal appearance, with intact dental lamina and no evidence of root resorption.^[17] Taylor^[48] documented a case where a supplemental lateral incisor from within a patient's mouth was transplanted to replace a geminated tooth on the contralateral side. Three years after reimplantation, the tooth appeared firm and of normal color and electric pulp testing produced a reading. A further radiograph, later on, showed that the pulp chamber was almost completely obliterated by calcification. Slagsvold and Bjercke^[49] reported successful substitution of a geminated right lateral incisor of abnormal width on the right side with a supplemental lateral incisor from the left side of the upper jaw.

Intentional replantation is another treatment approach that involves supernumerary later incisors. It primarily aims to resolve the restorative needs of maxillary anterior teeth fused to supernumerary lateral incisors. The application of this treatment approach has been carried out by extraction and extraoral hemisection of half of the fused tooth, replantation of the remaining part, and finally, orthodontic treatment. Tsurumachi and Kuno^[50] described treating a maxillary incisor fused to a supernumerary lateral incisor with connections between the root canals. Three-year recall examination showed clinical and radiographic evidence of healing and regaining of satisfactory teeth alignment. A similar report has been documented by Yagci *et al.*^[51] They reported favorable clinical outcomes after 2 years.

With respect to the limitations presented in each of studies included in this review, the different study methodologies and data collection methods used by the investigators may have resulted in variations in the prevalence figures and characteristics of supernumerary teeth reported in this study. The exclusive reliance on English-language studies may not represent all of the evidence. Excluding languages other than English may introduce a bias and lead to erroneous conclusions. In general, further studies should include more representative samples and should explore the etiological factors, environmental or genetic, that are common to the studied population.

CONCLUSION

A supplemental lateral incisor is a rare developmental anomaly. Early diagnosis and treatment are suggested to prevent orthodontic and esthetic complications. Therefore, careful clinical and radiographic examination is essential to make a correct and rational diagnosis for any patient. Correct examination and diagnosis may reveal rare entities and help us to detect other unnoticed dental anomalies or associated syndromes that should be appropriately treated. The treatment depends on the respective case

and their management should be part of a comprehensive treatment plan and should not be considered in isolation. Follow-ups with regular radiographs are recommended in cases where the supernumerary lateral incisors have occurred with no associated pathology and not causing any functional and esthetic interference.

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Conflicts of interest

There are no conflicts of interest.

Authors contributions

Naji Ziad Arandi: study conception, literature search, data extraction, data interpretation, and manuscript editing and writing.

Ethical Policy and Institutional Review Board statement

Not applicable.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Data availability statement

The data supporting the study results are available from the corresponding author. (Dr. Naji Arandi, arandi@gmail.com)

REFERENCES

- Arandi NZ, Abu-Ali A, Mustafa S. Supernumerary teeth: A retrospective cross-sectional study from Palestine. *Pesqui Bras Odontopediatr Clin Integr* 2020;20:1-9.
- Primosch RE. Anterior supernumerary teeth--assessment and surgical intervention in children. *Pediatr Dent* 1981;3:204-15.
- Mallineni SK, Kumar S. Supernumerary teeth: Review of the literature with recent updates. *Conf Pap Sci* 2014;2014:1-6.
- Wedrychowska-Szulc B, Janiszewska-Olszowska J. The supernumerary lateral incisors-morphology and concomitant abnormalities. *Ann Acad Stetin* 2007;53:107-13.
- Khandelwal P, Rai AB, Bulgannawar B, Hajira N, Masih A, Jyani A. Prevalence, characteristics, and morphology of supernumerary teeth among patients visiting a dental institution in Rajasthan. *Contemp Clin Dent* 2018;9:349-56.
- Amini F. Prevalence and pattern of accessory teeth (Hyperdontia) in permanent dentition of Iranian orthodontic patients. *Iran J Public Health* 2013;42:1259-65.
- Dobles NJ, Meza RS. Prevalence of supernumerary teeth in a Mexican sample. *Rev Mex Ortod* 2015;3:e88-91.
- Öztaş B, Bardak Ç, Kurşun EŞ, Akbulut N. Clinical characteristics of non-syndromic supernumerary teeth in a cohort of Turkish patients. *Oral Radiol* 2011;27:108-13.
- Esenlik E, Sayin MÖ, Atilla AO, Özen T, Altun C, Başak F. Supernumerary teeth in a Turkish population. *Am J Orthod Dentofac Orthop* 2009;136:848-52.
- Bäckman B, Wahlin YB. Variations in number and morphology of permanent teeth in 7-year-old Swedish children. *Int J Paediatr Dent* 2001;11:11-7.
- Anibor E, Mabiaku Y, Inikoro C. Prevalence of supernumerary teeth in a Nigerian population. *Int J Forensic Med Invest* 2015;1:7-9.
- Johnson DB. Supernumerary lateral incisor teeth. *Brit J Orthodont* 1974;1:149-57.
- Gupta S, Praveen Kumar P. A study on prevalence, complications, and possible etiologic factors of supernumerary teeth in 6–12-year-old schoolchildren of Rohtak, India. *Indian J Dent Sci* 2019;11:10-3.
- Primo LG, Wilhelm RS, Bastos EP dos S. Frequency and characteristics of supernumerary teeth in Brazilian children: Consequences and proposed treatments. *Rev Odontol Univ São Paulo* 1997;11:231-7.
- Hekmatfar S, Badkash S, Jafari K. Bilateral supernumerary maxillary lateral incisors: A rare case report. *J Oral Heal Oral Epidemiol* 2015;4:46-50.
- Andrei OC, Farcaşiu C, Mărgărit R, Dinescu MI, Tănăsescu LA, Dăguci L, *et al.* Unilateral supplemental maxillary lateral incisor: Report of three rare cases and literature review. *Rom J Morphol Embryol* 2019;60:947-53.
- Robertson NR, Jones ML, Roberts WR. Bilateral supplemental laterals: An unusual transplantation approach. *Br J Orthod* 1984;11:21-3.
- Dowling P, Delap E. A case with bilateral paired maxillary supernumerary incisor teeth of supplemental and tuberculate form. *Int J Paediatr Dent* 1997;7:91-4.
- Lo Giudice G, Nigrone V, Longo A, Cicciù M. Supernumerary and supplemental teeth: Case report. *Eur J Paediatr Dent* 2008;9:97-101.
- Singla A, Negi A. A case with bilateral supplemental maxillary lateral incisors. *Indian J Dent Sci* 2010;2:1-4.
- Yildirim G, Bayrak S. Early diagnosis of bilateral supplemental primary and permanent maxillary lateral incisors: A case report. *Eur J Dent* 2011;5:215-9.
- Anil P. Supplemental permanent maxillary lateral incisor: A rare case. *IOSR J Dent Med Sci* 2012;1:24-6.
- Kini A, Manjunatha M, Shubhashini N, Shija, Sunil Kumar VC, Jayashankar DN. Supernumerary lateral incisor. *J Contemp Dent Pract* 2013;14:129-32.
- Nagpal A, Hans MK, Shetty S, Kaur N, Kumar S. Non-syndromic bilateral supplemental maxillary lateral incisors: A rare case. *J Clin Diagnostic Res* 2013;7:1812-3.
- Bhullar MK, Uppal AS, Kochhar GK, Singh R. Bilateral supplemental permanent maxillary lateral incisors in a non-syndromic patient. *BMJ Case Rep* 2014;2014:bcr2014204730.
- Rodrigues C, Sangeetha R, D'Souza M. Supplemental permanent maxillary lateral incisor: A case report. *J Evol Med Dent Sci* 2014;3:1081-4.
- Shinohara AL, Grava EF De, Rodrigues ADC, Andreo JC, Buchaim RL, Kuga MC, *et al.* Ipsilateral supplemental lateral incisors: A case report. *J Res Dent* 2014;3:600-5.
- Jana S, Chakraborty A, Dey B, Singh G. Bilateral supplemental maxillary lateral incisors in the permanent dentition - a rare case report. *Int J Oral Heal Med Res* 2017;4:73-5.
- Chalakkal P, Krishnan R, De Souza N, Da Costa GC. A rare occurrence of supplementary maxillary lateral incisors and a detailed review on supernumerary teeth. *J Oral Maxillofac Pathol* 2018;22:149.
- Cristina BD, Bratu E, Mariana P, Popa G, Silvia P. The prevalence of supernumerary teeth in a group of patients in Western Romania. *Acta Marisiensis Ser Medica* 2012;57:581-4.
- Singh VP, Sharma A, Sharma S. Supernumerary teeth in Nepalese children. *Sci World J* 2014;2014:5.

32. Celikoglu M, Kamak H, Oktay H. Prevalence and characteristics of supernumerary teeth in a non-syndrome Turkish population: Associated pathologies and proposed treatment. *Med Oral Patol Oral Cir Bucal* 2010;15:4-7.
33. Burhan AS, Nawaya FR, Arabi Katbi ME, Al-Jawabra AS. Prevalence of supernumerary teeth in a nonsyndromic Syrian sample. *J Egypt Public Health Assoc* 2015;90:146-9.
34. Mossaz J, Kloukos D, Pandis N, Suter VGA, Katsaros C, Bornstein MM. Morphologic characteristics, location, and associated complications of maxillary and mandibular supernumerary teeth as evaluated using cone beam computed tomography. *Eur J Orthod* 2014;36:708-18.
35. Bereket C, Çakir-Özkan N, Şener I, Bulut E, Baştan A. Analyses of 1100 supernumerary teeth in a nonsyndromic Turkish population: A retrospective multicenter study. *Niger J Clin Pract* 2015;18:731-8.
36. Scheiner MA, Sampson WJ. Supernumerary teeth: A review of the literature and four case reports. *Aust Dent J* 1997;42:160-5.
37. Cammarata-scalisi F, Avendano A, Callea M. Main genetic entities associated with supernumerary teeth. *Arch Argent Pediatr* 2018;116:437-43.
38. Toureno L, Park JH, Cederberg RA, Hwang EH, Shin J-W. Identification of supernumerary teeth in 2D and 3D: Review of literature and a proposal. *J Dent Educ* 2013;77:43-50.
39. Hattab FN, Yassin OM, Rawashdeh MA. Supernumerary teeth: Report of three cases and review of the literature. *ASDC J Dent Child* 61:382-93.
40. Gomes RR, Fonseca JAC, Paula LM, Acevedo AC, Mestrinho HD. Dental anomalies in primary dentition and their corresponding permanent teeth. *Clin Oral Investig* 2014;18:1361-7.
41. Whittington BR, Durward CS. Survey of anomalies in primary teeth and their correlation with the permanent dentition. *N Z Dent J* 1996;92:4-8.
42. Anthonappa RP, King NM, Rabie ABM, Mallineni SK. Reliability of panoramic radiographs for identifying supernumerary teeth in children. *Int J Paediatr Dent* 2012;22:37-43.
43. Parolia A, Kundabala M, Dahal M, Mohan M, Thomas MS. Management of supernumerary teeth. *J Conserv Dent* 2011;14:221-4.
44. Gürler G, Delilbaşı Ç, Delilbaşı E. Investigation of impacted supernumerary teeth: A cone beam computed tomography (CBCT) study. *J Istanbul Univ Fac Dent* 2017;51:18-24.
45. Katheria BC, Kau CH, Tate R, Chen JW, English J, Bouquot J. Effectiveness of impacted and supernumerary tooth diagnosis from traditional radiography versus cone beam computed tomography. *Pediatr Dent* 2010;32:304-9.
46. Kumar Bhat P, K NH, Srikanthan R, Rai N. Supplemental maxillary lateral incisors in primary and permanent dentition: A case report. *Int J Oral Care Res* 2014;2:55-8.
47. Czochrowska EM, Stenvik A, Bjercke B, Zachrisson BU. Outcome of tooth transplantation: Survival and success rates 17–41 years posttreatment. *Am J Orthod Dentofac Orthop* 2002;121:110-9.
48. Taylor GS. Auto transplant replacement of a geminated incisor by a supplemental incisor. *Br J Orthod* 1979;6:195-8.
49. Slagsvold O, Bjercke B. Applicability of autotransplantation in cases of missing upper anterior teeth. *Am J Orthod* 1978;74:410-21.
50. Tsurumachi T, Kuno T. Endodontic and orthodontic treatment of a cross-bite fused maxillary lateral incisor. *Int Endod J* 2003;36:135-42.
51. Yagci A, Cantekin K, Buyuk SK, Pala K. The multidisciplinary management of fused maxillary lateral incisor with a supernumerary tooth in cleft lip adolescence. *Case Rep Dent* 2014;2014:1-5.