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EARLY DIAGNOSIS ODONTOGENIC CYSTIC FORMATIONS OF THE JAWS OF VARIOUS
ORIGINS

Irgashev Shoxrux Xasanovich

Samarkand State Medical University, Uzbekistan

ABOUT ARTICLE

Key words: Surgeons, radiologists, pathologists.**Received:** 14.04.2024**Accepted:** 19.04.2024**Published:** 24.04.2024**Abstract:** Surgeons, radiologists, and pathologists have refined the classification of tumors and tumor-like formations in the maxillofacial region over the years in order to develop uniform treatment protocols. Classification of tumors by origin and histologic criteria is accepted worldwide. However, it is not easy to trace the origin of all variants of tumors and tumor-like projections in odontogenic tissues.

INTRODUCTION

Surgeons, radiologists, and pathologists have refined the classification of tumors and tumor-like formations in the maxillofacial region over the years in order to develop uniform treatment protocols. Classification of tumors by origin and histologic criteria is accepted worldwide. However, it is not easy to trace the origin of all variants of tumors and tumor-like projections in odontogenic tissues. This is mainly due to the specificity of some lesions and the lack of time to study and compare samples. Odontogenic tumors (OO) belong to a group of lesions derived from odontogenic tissue or its remnants that progress from tumorigenesis to benign and malignant neoplasms with various invasive and metastatic potential [1, 2]. One of the main changes has been the inclusion of odontogenic keratocysts among benign but locally aggressive epithelial odontogenic tumors, which have been renamed keratocystic odontogenic tumors (KCOT). Keratocystic odontogenic tumors are single or multicystic intraosseous tumors of odontogenic origin with characteristic parakeratosis of multilayered squamous epithelium and the potential for invasive, infiltrative growth [3] KCOT is one of the most consistent and common manifestations of the cancerous basal cell non-carcinomatous syndrome (NBCCS). It accounts for 65-100% of patients with odontogenic tumors. Clinically, the lesions

are characterized by aggressive growth and a tendency to recur after surgery. At the same time, increased mitotic activity and the possible formation of daughter cysts within the wall are observed. The presence of daughter cysts [6] has been studied to be associated with recurrence of KCOT. The mandible is more commonly affected than the maxilla, and the occipital region is less commonly affected. Histopathologic examination of the removed tumor is necessary to make a final diagnosis [13]; patients with a histopathologic diagnosis of KCOT require further follow-up; subsequent radiographic studies should be performed to reduce the risk of recurrence after surgical treatment of KCOT patients, especially during the first year. There are two treatment modalities for KCOT: conservative and aggressive. Conservative treatment includes enucleation with or without curettage and marsupialization. Aggressive treatments include peripheral osteotomy, chemical curettage with Carney's solution, and jaw resection [8]. To date, there is no clear understanding of the management of CRT patients. According to some authors, simple enucleation may be the most appropriate method of treating CCT [9], and other authors believe that enucleation followed by debridement is an effective way to treat large keratinocystic odontogenic tumors [11, 12]. The main treatment for odontogenic jaw cysts is cystectomy - surgical intervention. However, cystectomy or its modification may be necessary due to the peculiarities of the cyst's localization and its close association with important anatomical formations located in the vicinity [14]. Understanding the most common and rare odontogenic tumors will greatly assist in their study and clinical treatment. Assessing the incidence of tumors in different populations is important for preliminary diagnosis and further planning of biopsies based on clinical and radiologic features. It is also useful for patient counseling and treatment planning. Knowledge of the histologic and clinicopathologic features of various odontogenic tumors (described in various manuals worldwide) can help identify risk groups and factors that may be associated with biologically complex structures [2]. The purpose of this study is to study the behavior of odontogenic cyst formation in the jaws, to analyze a series of histologically and radiologically confirmed cases, and to select treatment strategies for patients.

METHODS

Data from anamnesis and radiography of patients with odontogenic cyst formation in the jaws who were undergoing inpatient treatment at the Maxillofacial and Plastic Surgery Clinic of the Russian State Medical University named after the scholar I. P. Pavlov were used. Data collection took place over a two-year period from 2012 to 2013. Age, gender, site, histological examination data, and type of surgery were tabulated and analyzed. The study was based on the histological classification of tumors according to WHO 2005, taking into account clinical and histopathological information, and on the classification

of jaw cysts according to their origin, taking into account etiology. In doubtful cases, the patient's name and address were noted in duplicate, and a repeat examination was requested to determine recurrence.

RESULTS Of the 110 cases analyzed, the most common types of cyst formation were inflammatory actinic cysts (76.4%) and cysts with signs of epithelial keratinization (23.6%). 30.9% of cysts were localized in the mandibular body, mainly in the molar and epiphysis areas. 43.6% of cysts were localized in the maxilla, with the rare exception of 4.5% in the maxillary sinus and 20.9% in the mandibular branches and corners. Ameloblastomas and keratinocystic odontogenic tumors were more frequently localized to the mandible. The mean age of patients was 35.2 years. Peak incidence (47.3%) occurred in the fourth decade, between 41 and 60 years of age. The overall male to female ratio was 1:1.3. Histologic examination showed that the lumen of the cysts contained a variety of viscous inclusions, ranging from straw-colored liquid to thick sour cream-like masses, and in 4.5% of cases, pus and cholesterol inclusions. Flat keratocysts and orthokeratotic cysts with infiltrative growth were present in 23.6% of cases. The percentage of cysts without keratinization and inclusion bodies was 71.8%. Surgical treatment in the form of excision of the cyst wall was performed in 52.7% of cases, and removal of the entire cyst and capsule was performed in 47.3% of cases.

CONCLUSIONS

The combined approach developed, based on the available histological and radiographic data storage, has made it possible to monitor patients for atypia and recurrence of cyst formation. A central registry of tumors is recommended to facilitate diagnosis and treatment of patients. Retrospective analysis of the relative incidence of odontogenic cyst formation in the jaws would help maxillofacial surgeons, maxillofacial surgeons, and pathologists understand the etiology. In general, this issue requires further study and the collection of new data.

REFERENCES

1. Абдуллаева П. Р., Ахмедов А. А. СПОСОБ ЛЕЧЕНИЯ ИШЕМИЧЕСКИХ СОСТОЯНИЙ ЗРИТЕЛЬНОГО НЕРВА И СЕТЧАТКИ (ЛИТЕРАТУРНЫЙ ОБЗОР): Medical science //Ethiopian International Journal of Multidisciplinary Research. – 2023. – Т. 10. – №. 09. – С. 18-23.
2. Ризаев Ж. А., Ахмедов А. А. ОСНОВЫ СТОМАТОЛОГИЧЕСКОЙ ПОМОЩИ В РЕСПУБЛИКЕ УЗБЕКИСТАН НА ОСНОВЕ РАЗВИТИЯ ОБЩЕЙ ВРАЧЕБНОЙ ПРАКТИКИ //ЖУРНАЛ СТОМАТОЛОГИИ И КРАНИОФАЦИАЛЬНЫХ ИССЛЕДОВАНИЙ. – 2023. – Т. 4. – №. 3.

3. Абдуллаева Н. И., Ахмедов А. А. ОСТЕО-ИММУНОЛОГИЧЕСКИЙ СТАТУС ПАЦИЕНТОВ С ЗАБОЛЕВАНИЙ ПАРОДОНТА В ПОДРОСТКОВОМ И МОЛОДОМ ВОЗРАСТЕ //TA'LIM VA RIVOJLANISH TANHILI ONLAYN ILMIY JURNALI. – 2023. – Т. 3. – №. 11. – С. 143-149.
4. Ахмедов А. А. Иммунологические аспекты патогенеза гингивита и пародонтита //IQRO. – 2023. – Т. 3. – №. 2. – С. 121-123.
5. Ризаев Ж. А., Ахмедов А. А. GROWTH AND DEVELOPMENT OF GENERAL MEDICAL PRACTICE IN THE REPUBLIC OF UZBEKISTAN TO IMPROVE DENTAL CARE //ЖУРНАЛ СТОМАТОЛОГИИ И КРАНИОФАЦИАЛЬНЫХ ИССЛЕДОВАНИЙ. – 2023. – Т. 4. – №. 3.
6. Ахмедов А. А., Нарзиева Н. DENTAL PROSTHETICS ON IMPLANTS AND THEIR FEATURES //American Journal of Pedagogical and Educational Research. – 2023. – Т. 16. – С. 132-135.
7. Astanovich A. D. A. et al. The State of Periodontal Tissues in Athletes Engaged in Cyclic Sports //Annals of the Romanian Society for Cell Biology. – 2021. – С. 235-241.
8. Alimjanovich R. J., Astanovich A. A. СОВЕРШЕНСТВОВАНИЕ СТОМАТОЛОГИЧЕСКОЙ ПОМОЩИ В УЗБЕКИСТАНЕ С ИСПОЛЬЗОВАНИЕМ КОНЦЕПТУАЛЬНОГО ПОДХОДА ДЛЯ УЛУЧШЕНИЕ ЕЕ КАЧЕСТВА //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2023. – Т. 8. – №. 4.
9. Ортикова Н. Глобализация биоэтики в период пандемии COVID-19 //Общество и инновации. – 2020. – Т. 1. – №. 1/S. – С. 677-682.
10. Ортикова Н. Влияние психоэмоционального напряжения детей на состояние здоровья полости рта //Общество и инновации. – 2023. – Т. 4. – №. 7/S. – С. 328-333.
11. Ортикова Н. Х., Ризаев Ж. А., Мелибаев Б. А. ПСИХОЛОГИЧЕСКИЕ АСПЕКТЫ ПОСТРОЕНИЯ СТОМАТОЛОГИЧЕСКОГО ПРИЕМА ПАЦИЕНТОВ ДЕТСКОГО ВОЗРАСТА //EDITOR COORDINATOR. – 2021. – С. 554.
12. Ортикова Н. Тенденция эффективности профилактических мероприятий путем коррекции психологического стресса у детей на стоматологическом приёме //Общество и инновации. – 2022. – Т. 3. – №. 6. – С. 181-189.
13. Qobilovna B. Z., Nodirovich E. A. EVALUATION OF ORTHOPEDIC TREATMENT WITH REMOVABLE DENTAL PROSTHESES FOR PATIENTS WITH PAIR PATHOLOGY //Spectrum Journal of Innovation, Reforms and Development. – 2023. – Т. 11. – С. 95-101.
14. Anvarovich E. S., Qobilovna B. Z. INFLUENCE OF DIFFERENT TYPES OF RETRACTION THREADS ON THE DEGREE OF GINGI RECESSION //Spectrum Journal of Innovation, Reforms and Development. – 2023. – Т. 11. – С. 84-86.
15. Tohirovna M. L., Qobilovna B. Z. Optimization of Complex Methods Treatment of Inflammatory Periodontal Diseases //Eurasian Research Bulletin. – 2023. – Т. 17. – С. 138-143.

- 16.**Tavakalova Q. M., Qobilovna B. Z., Sarvinoz Y. Preventive Measures in the Treatment of Caries in School children //Eurasian Research Bulletin. – 2023. – Т. 17. – С. 60-65.
- 17.**Исламова Н., Чакконов Ф. Роль продуктов перекисного окисления липидов и противовоспалительных цитокинов крови в развитии заболеваний полости рта при гипотиреозе //Общество и инновации. – 2020. – Т. 1. – №. 1/с. – С. 577-582.
- 18.**Fakhriddin C., Shokhruh S., Nilufar I. ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 1.
- 19.**Shoxrux S., Shoxrux I., Faxriddin C. PREVENTION AND TREATMENT OF ORAL INFECTIONS IN DENTURE WEARERS //International Journal of Early Childhood Special Education. – 2022. – Т. 14. – №. 4.
- 20.**Xusanovich C. F. COMPLETE REMOVABLE PROSTHESIS SUPPORTED BY IMPLANTS //European International Journal of Multidisciplinary Research and Management Studies. – 2023. – Т. 3. – №. 11. – С. 127-133.
- 21.**Xusanovich C. F. et al. PROSTHETICS A COMPLETE REMOVABLE PROSTHESIS BASED ON IMPLANTS //European International Journal of Multidisciplinary Research and Management Studies. – 2023. – Т. 3. – №. 11. – С. 122-126.
- 22.**Najmiddinovich S. N. et al. CARIES IN SCHOOL CHILDREN AND TREATMENT PREVENTIVE MEASURES //American Journal of Pedagogical and Educational Research. – 2023. – Т. 16. – С. 44-49.
- 23.**Khusanovich K. B. R. C. F. TYPES AND APPLICATIONS OF DENTAL COMPLIMENTS //Journal of Modern Educational Achievements. – 2023. – Т. 5. – №. 5. – С. 95-99.
- 24.**Zarnigor J. MAIN ROLE OF HYGIENIC EDUCATION IN THE SYSTEM PRIMARY PREVENTION OF DENTAL DISEASES OF PATIENT //European International Journal of Multidisciplinary Research and Management Studies. – 2023. – Т. 3. – №. 11. – С. 157-163.
- 25.**Qizi J. Z. B. METHODS OF OPTIMIZATION OF TREATMENT OF PERIODONTAL DISEASES USING NEW TECHNOLOGIES //European International Journal of Multidisciplinary Research and Management Studies. – 2023. – Т. 3. – №. 10. – С. 234-241.
- 26.**Kobilovna B. Z., Rushana R. COMPARATIVE EVALUATION OF PARTIAL DENTURES WITH VARIOUS FASTENING ELEMENTS //Intent Research Scientific Journal. – 2023. – Т. 2. – №. 9. – С. 98-103.
- 27.**Qobilovna B. Z., Maxzuna U. Improvement of Providing Therapeutic Dental Care to Pregnant Women. Therapeutic and Preventive Measures //Eurasian Research Bulletin. – 2023. – Т. 16. – С. 146-150.

- 28.** Tavakalova Q. M., Qobilovna B. Z., Sarvinoz Y. Results of the Prevention Program Dental Diseases in School-Age Children //Eurasian Research Bulletin. – 2023. – T. 17. – C. 50-54
- 29.** Jurabek T. D., Qobilovna B. Z. Principles of Prevention of Dental Diseases in Children in Modern Conditions //Eurasian Research Bulletin. – 2023. – T. 17. – C. 55-59.
- 30.** Tavakalova Q. M., Qobilovna B. Z., Sarvinoz Y. Preventive Measures in the Treatment of Caries in School children //Eurasian Research Bulletin. – 2023. – T. 17. – C. 60-65