

UNIVERSITY „GOCE DEČEV“ – ŠTIP
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ORALSURGERY TREATMENT OF RADICULAR CYSTS

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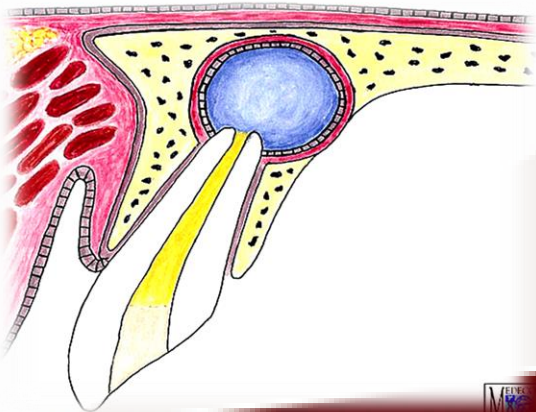


INTRODUCTION

Cysts are pathological formations that develop in the bone tissues or in the soft tissues of the upper and lower jaw.

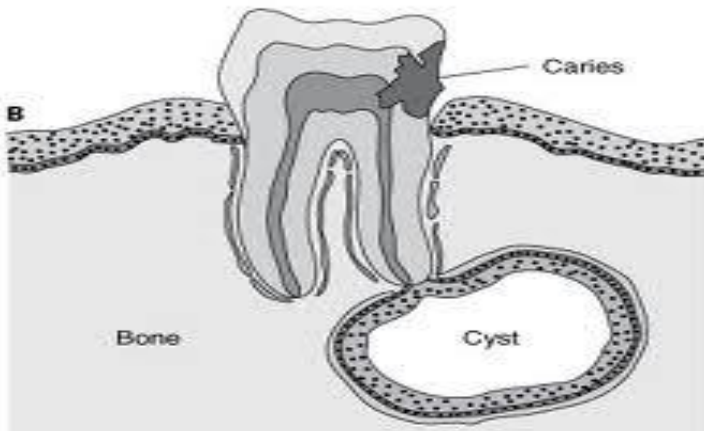
- cystic cover
- cystic content

Radicular cysts are one of the most common and their prevalence is over 50% making up more than two thirds of all jaw cysts.

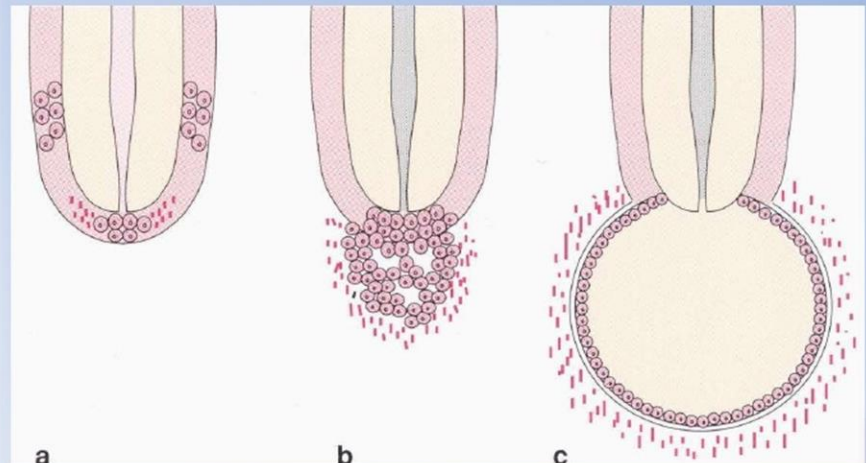


THEORETICAL BASES AND LITERATURE REVIEW

- Etiopathogenesis of radicular jaw cysts



Radicular cyst / pathogenesis



a Initiation

b Cyst formation

c Cyst enlargement

▪ Clinical presentation and diagnosis of radicular cysts

Asymptomatic / Symptomatic

- pain
- edema of the vestibular bone lamella
- Changed tooth color
- fistula



Oral surgical procedures in the treatment of jaw cysts

- *Marsupialization (Cystotomy) - Partsch 1*
- *Enucleation (Cystectomy) - Patch 2*
 - **cystectomy with apicotomy**
 - **cystectomy by extraction**
 - **closed technique**
 - **open technique**

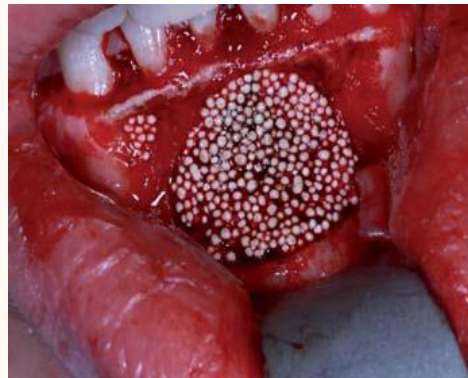


Application of allogeneic materials in the treatment of radical cysts

➤ BONE GRAFTS

The most commonly used autogenous graft is the spongy bone of the pelvis (crista iliaca), from the rib or from the tibia.

Synthetic materials (alloplastic) mainly consist of hydroxyapatite or calcium triphosphate



PURPOSE AND SUBJECT OF LABOR

Main purpose: to evaluate the prevalence of different types of oral surgery treatment in radicular cysts.

Specific goals:

- 1. To evaluate the prevalence of radicular cysts in relation to the gender and age of the patients studied;**
- 2. To determine the present symptomatology of affected teeth;**
- 3. To evaluate the therapeutic procedures regarding the intraoperative parameters in the treated cases;**
- 4. To determine the prevalence of postoperative parameters in the treated cases with treated radical cysts.**

MATERIAL AND METHOD OF WORK

The study has been conducted at P.H.O. specialistic dental clinic for oral surgery “ Dr. Nikola Dzidrov- Štip.

Research sample:

22 participants (8 female;14 male)

Age range: 10-75

(All participants have given their consent for the usage of data provided)

Questionnaires

3. Крварење

-Нема:

- Има:

-Контролни прегледи:

1.РТГ (по 8 недели):

2. РТГ (по 6 месеци):

-коскено

-фиброзно зараснување

Забелешка: _____

Method

The following procedures have been performed during the study:

1. Detailed anamnesis;
2. Clinical examination;
3. Paraclinical investigations.

- diagnosis
- therapy
 - cystectomy cum apicotomia
 - enucleatio in toto cum extractio



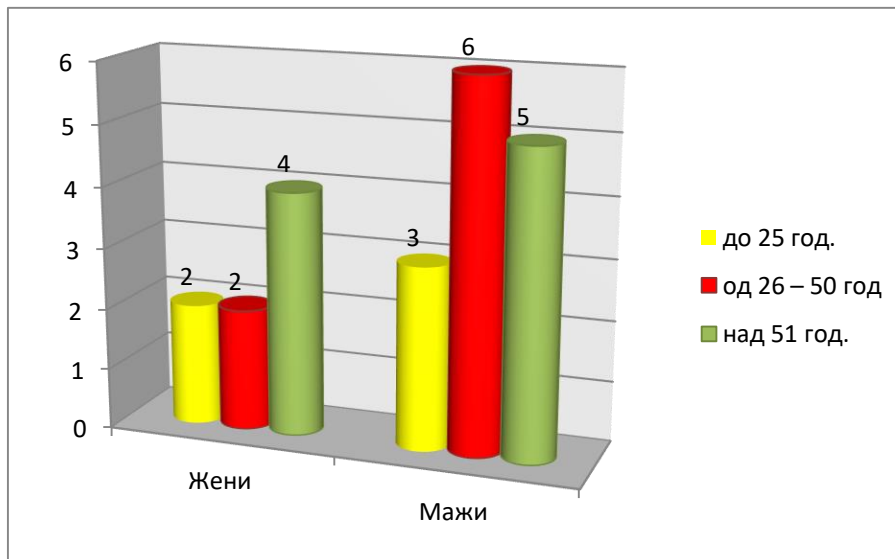
- statistical analysis of the results obtained from the study

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RESEARCH RESULTS

Table 1. Respondents classification by gender and age

| Age | < 25 год. | 26 – 50 age | > 51 год. | Total |
|--------|-----------|-------------|-----------|----------|
| Female | 2(9%) | 2(9%) | 4(18%) | 8(36%) |
| Male | 3(13.7%) | 6(27.4%) | 5(22.7%) | 14(64%) |
| Total | 5(22.7%) | 8(36.4%) | 9(40.7%) | 22(100%) |



-Winnie Pradel and Gunter Lauer
40 -60 age
16 male and 4 female

-Joseba Andoni and Garcia De La Fuente
> 50 години

-H. W. Bart Schreuder and Rene P. Veth
18 - 25 age
14 maleи 12 female

Table 2. Representation of respondents' reason for visiting a dentist

| Reason | Male | Female | Total |
|----------------|----------|----------|-----------|
| Pain | 9(41%) | 6(27.5%) | 15(68.5%) |
| Swell and pain | 3(13.5%) | 0(0%) | 3(13.5%) |
| Other reasons | 2(9%) | 2(9%) | 4(18%) |

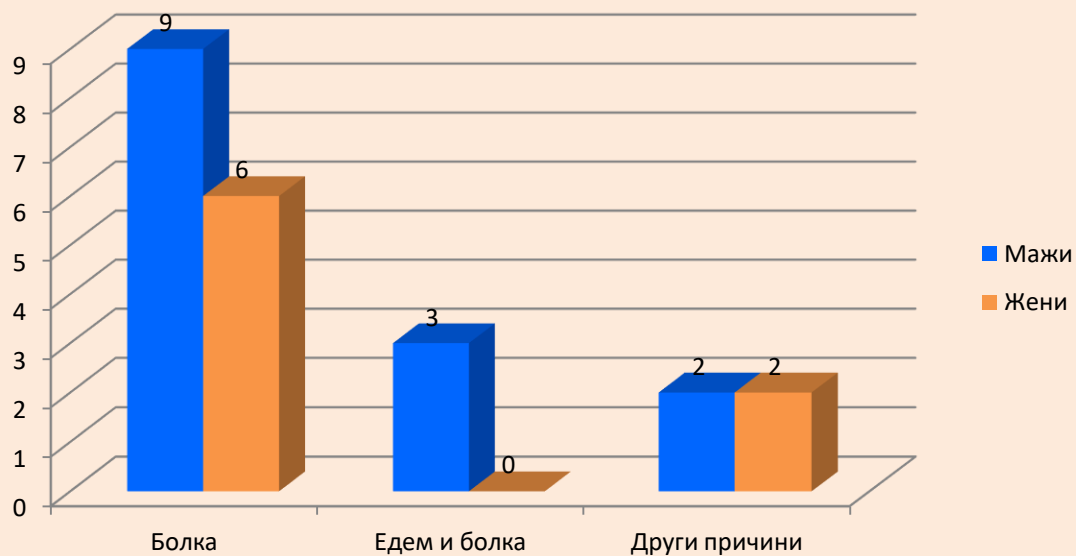
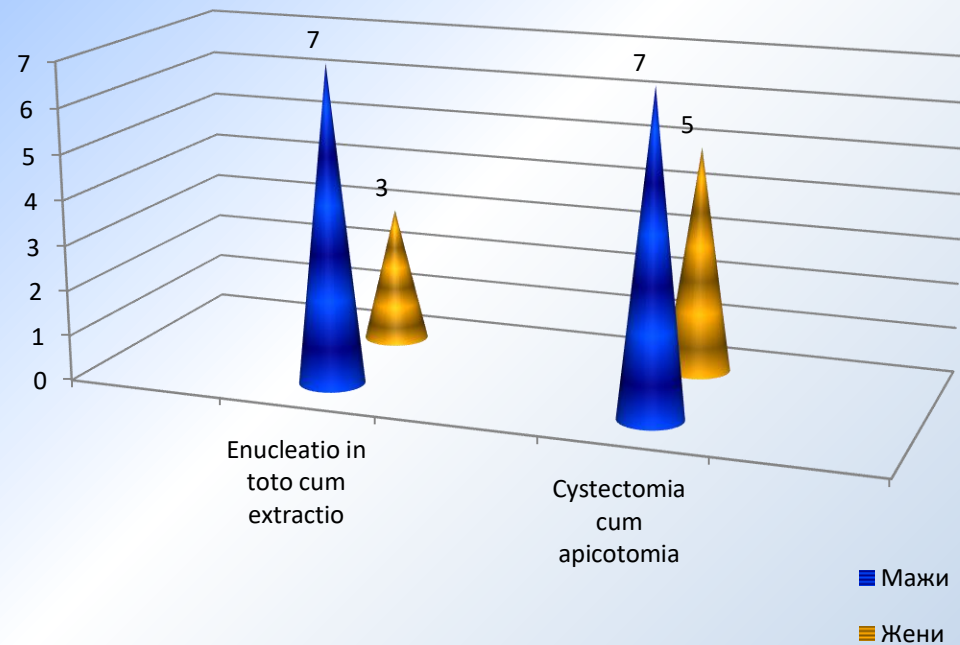


Table 3. Representation of the therapy results

| Therapy | Male | Female | Total |
|----------------------------------|--------|--------|---------|
| Enucleatio in toto cum extractio | 7(32%) | 3(13%) | 10(45%) |
| Cystectomy cum apicotomia | 7(32%) | 5(23%) | 12(55%) |



Winnie Pradel and Gunter Lauer

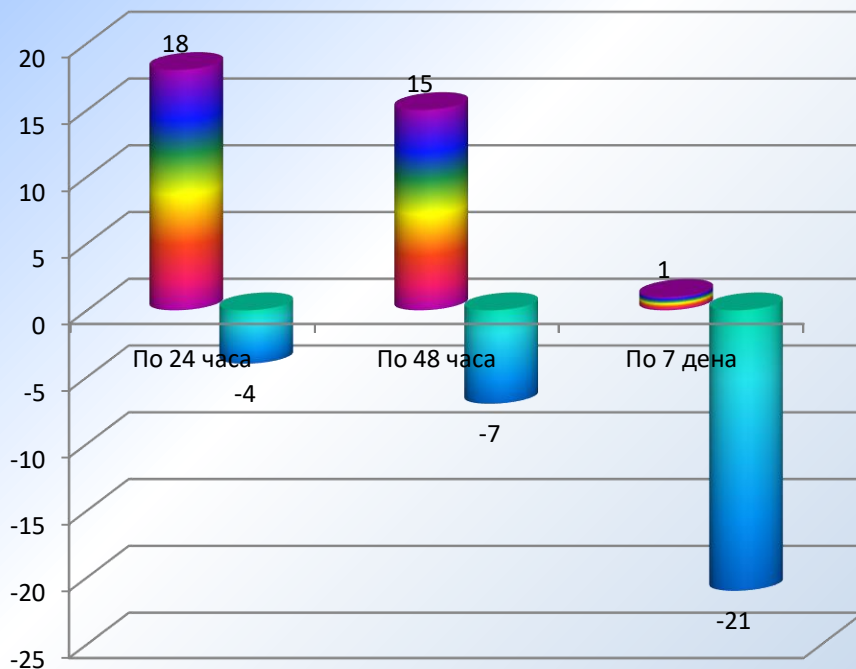
17 cases (77%) -Cystectomy cum apicotomia
 5 cases (23%) –Enucleatio in toto cum extractio

H. W. Bart Schreuder and Rene P. Veth

15 cases (57.6%) –Cystectomy cum apicotomia
 11 cases (42.4%) –Enucleatio in toto cum extractio

Table 4. Results of postoperative parameters – pain

| Pain | + | - |
|----------|----------|------------|
| 24 hours | 18 (82%) | 4 (18%) |
| 48 hours | 15 (68%) | 7 (32%) |
| 7 days | 1 (4.5%) | 21 (95.5%) |



H. W. Bart Schreuder and Rene P. Veth

Има
Нема

18 cases(66.6%)-24 hours

10 cases (37%) -48 hours

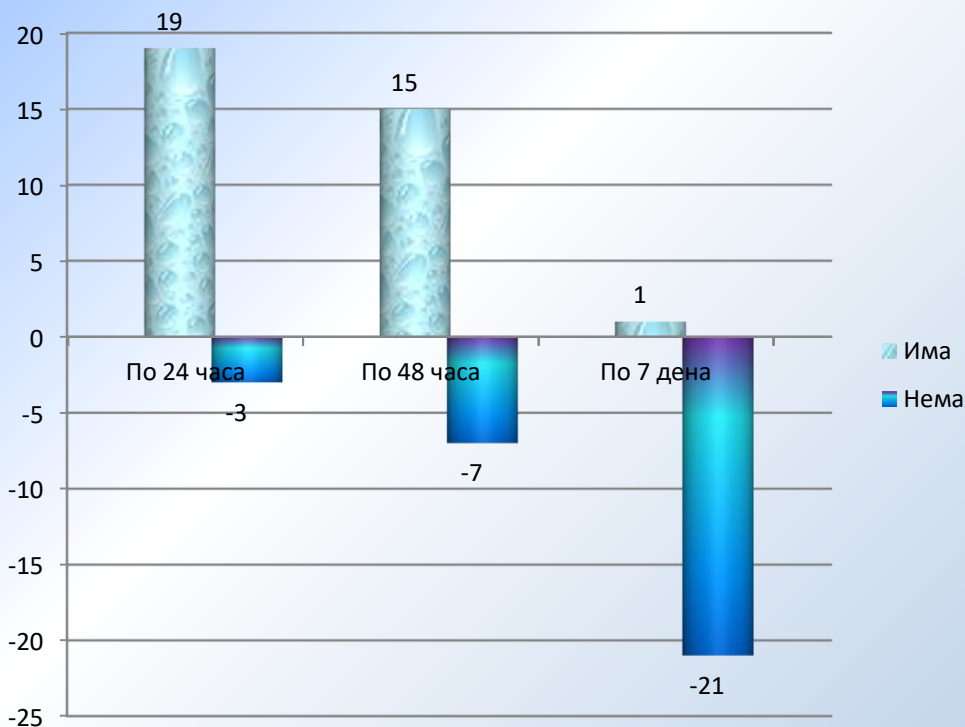
Steven Gitelis, Warren Haggard and

Patricia Piasecki, 24 hours (8.6%)

,(4.5%)48hours

Table 5. Results of postoperative parameters – edema

| Edema | + | - |
|-----------------|----------|------------|
| 24 hours | 19 (86%) | 3 (14%) |
| 48 hours | 15 (68%) | 7 (32%) |
| 7 days | 1 (4.5%) | 21 (95.5%) |



H. W. Bart Schreuder and Rene P. Veth, 24 hours (66.6%) , 48 hours (37%).

Steven Gitelis, Warren Haggard and Patricia Piasecki, 24 hours (8.6%), 48 hours(4.5%)

CONCLUSION

- 1. The prevalence of radicular cysts is higher among males (64%), compared to females (36%), while in terms of age, radicular cysts are most prevalent among respondents over the age of 51 (40.7%).**
- 2. In terms of affected teeth and segments of the jaws, the most commonly affected by radical cysts are the first molar in both maxilla and mandible (28%).**

3. Symptoms in affected teeth with radicular cyst were: pain (present in 90% of the participants), edema (60%), fistula (10%), and tooth discoloration (35%).

4. The therapeutic procedures used for the treatment of radicular cysts were: extraction-induced enucleation (45%) and cystectomy with apicotomy (55%).

5. From the postoperative parameters, pain and edema were present in 82% of the participants in the first 24 hours, 68% felt pain in the following 48 hours, and only 4.5% felt pain in the following 7 days. Postoperative bleeding was noticed by 4.5% of the participants in the first 24 hours.