

REFERENCES

1. Иванов В. Практическа психосоматична медицина. 1999, Знание, с. 211.
2. Мичън Дж. Локалната анестезия в стоматологичната практика. Шаров, София, 2003, 140 с.
3. Ташев Т. Страх и страхови неврози. София, 2001, Здраве и щастие, с. 72.
4. Albanese AV. Intraligamentary anesthesia of the lower jaw. *G Anes Stomatol* 1989;18,1:7-12.
5. Dumbrigue HB, Lim MV, Rudman RA, Serrano A. A comparative study of anesthetic techniques for mandibular dental extraction. *Am J Dent* 1997; 10, 6:275-8.
6. Froum SJ, Tarnow D, Caiazzo A, Hochman MN. Histologic response to intraligament injections using a computerized local anesthetic delivery system. A pilot study in mini-swine. *J Periodontol* 2000; 71, 9:1453-9.
7. Galili D, Kaufman E, Garfunkel AA, Michaeli Y. Intraligamentary anesthesia - a histological study. *Int J Oral Surg* 1984;13,6:511-6.
8. Kaufman E. Transligamentary anesthesia: a review. *Anesth Pain Control Dent* 1992; 1, 3:133-41.
9. Meechan JG, Thomason JM. A comparison of 2 topical anesthetics on the discomfort of intraligamentary injections: a double-blind, split-mouth volunteer clinical trial. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1999; 87, 3:3 62-5.
10. Pertot WJ, Dejou J. Bone and root resorption. Effects of the force developed during periodontal ligament injections in dogs. *Oral Surg Oral Med Oral Pathol* 1992; 74, 3:3 57-63.
11. Tsirlis AT, Iakovidis DP, Parisis NA. Dry socket: frequency of occurrence after intraligamentary anesthesia. *Quintessence Int* 1992; 23, 8:575-7.

Address for correspondence:

Hristina Lalabonova, Ph.D., MD
Department of Oral Surgery, Faculty of Dentistry
Medical University-Plovdiv
24 , Veliko Tarnovo Str., 4000 Plovdiv, Bulgaria
Mobile: +359/888 608 406; e-mail: lalabonova@abv.bg

Journal of IMAB - Annual Proceeding (Scientific Papers) 2005, book 2

ASSESSMENT OF THE GENERAL HEALTH STATUS OF DENTAL PATIENTS BEFORE TEETH EXTRACTION

Kirova D., Hr. Lalabonova, M. Drangov, I. Chenchev
*Department of Oral Surgery,
Faculty of Dentistry, Medical University, Plovdiv*

ABSTRACT

The **aim** of the present study was to evaluate the general health status of patients that are planned to have teeth extraction under local anesthesia. **Material and methods:** We recruited 635 patients of those treated in the dental surgeries of the Department of Oral Surgery in the Faculty of Dentistry, Medical University, Plovdiv. Prospective questionnaire survey was used to assess their general health status. The questionnaire included demographic questions and questions about current disease. All concomitant diseases that could affect the application of local anesthetic agents were grouped into cardiovascular diseases, endocrine diseases, allergic diseases, and other diseases. **Results:** Most of the respondents were over 50 years old (66.33%). 43.94% of the patients reported presence of some concomitant dis-

ease, hypertension being the most prevalent disorder (34.49%). This disease poses a serious risk for patients who receive local anesthesia.

Key words: general health status, anesthetics, teeth extraction

INTRODUCTION

Stress, unhealthy dietary habits and unhealthy way of living, the use of all kinds of chemical substances have raised the morbidity rate of cardiovascular, endocrine and allergic diseases^{1,5} Along with the drastic aging of population, they present dentists with some serious problems connected with application of local anesthetic agents.^{2,4,6} Therefore we decided to study the general health status of patients

attending the clinical surgeries in the Department of Oral Surgery in the Faculty of Dentistry in Plovdiv Medical University.

MATERIAL AND METHODS

We conducted a prospective direct questionnaire survey with 635 patients undergoing teeth extraction in the clinical surgeries of Department of Oral Surgery in March, April and May 2005. A special questionnaire was developed (a form requiring informed consent) and signed by patients. It contained questions about the sex, gender and concomitant diseases of patients. The concomitant diseases were grouped in accordance with their capacity to affect the ap-

plication of local anesthetic agents: cardiovascular diseases, endocrine diseases, allergic diseases, and other diseases.

The results were analysed statistically using ANOVA.

RESULTS AND DISCUSSION

Out of 635 patients, 273 (43.94%) patients had some concomitant disease and 354 (56.06%) were clinically healthy.

The age and sex distribution of our study sample is presented in Table 1.

Table 1. Age and sex distribution of patients

Age \ Sex	Men			Women			Total		
	n	%	Sp	n	%	Sp	n	%	Sp
Up to 30 yrs	30	4.72	3.87	28	4.41	3.88	58	9.13	3.78
31 – 40 yrs	27	4.25	3.88	41	6.46	3.84	68	10.71	3.75
41 – 50 yrs	37	5.83	3.85	51	8.03	3.81	88	13.86	3.68
Over 51 yrs	180	28.35	3.36	241	37.95	3.13	421	66.30	2.30
Total	274	43.15	2.99	361	56.85	2.61	635	100	

Most of the treated patients (66.30%) are over 50 years old, the number of women exceeding that of men by 13.7%.

Table 2 presents the distribution of patients by disease. Part of the respondents had more than one concomitant disease.

Table 2. Distribution of patients by disease

Cardiovascular diseases	Endocrine diseases	Allergic diseases	Other diseases	Clinically healthy patients	Total
279	22	33	63	356	635
43.94	3.46	5.20	9.92	56.06	%
2.98	3.90	3.86	3.77	2.63	Sp

The patients with cardiovascular diseases are 43.94%, with hypertension being the prevalent disorder – a total of 219 (34.49%) patients reported that they had hypertension. This disorder causes serious problems in the dental service of patients. Diabetes forms a considerable part of the endocrine diseases (15 patients, 2.36%). Allergic patients were 33 (5.20%). All these diseases make the choice of anesthetic agent rather difficult.

CONCLUSION

The analysis of the results clearly indicates that patients subjected to oral dental surgery are predominantly older than 50. Almost half of the patients had some concomitant diseases with hypertension having the greatest incidence. This should make dentists extremely careful in applying local anesthesia as there might be serious complications if it is used incorrectly.

REFERENCES

1. Atanasov D. Urgent and emergency dental services. *ORMED*, Sofia, 2003:230-240.
2. Ivanov S. Local anesthesia. Teeth extraction and root amputation. Sofia 2003:43-44.
3. Michen J. Local anesthesia in dental practice. *Sharov*, Sofia 2003:35-36.
4. Polichronov N, et al. Propedeutics of dental and maxillofacial surgery. *Polichronos*, Sofia 1999.
5. Cholarski V, et al. Internal medicine for dental students. *Med y Fizyk Sofia*;1999
6. Amado-Cuesta S, Valmaseda-Castellon E, Berini-Aytes L, Gay-Escoda C. Complications of ambulatory oral surgery in patients over 65 years of age. *Med Oral* 2004; 9:253-62.

Address for correspondence:

Hristina Lalabonova, Ph.D., MD
Department of Oral Surgery, Faculty of Dentistry
Medical University-Plovdiv
24 , Veliko Tarnovo Str., 4000 Plovdiv, Bulgaria
Mobile: +359/888 608 406; e-mail: lalabonova@abv.bg

Journal of IMAB - Annual Proceeding (Scientific Papers) 2005, book 2

OPPORTUNITIES THE USE OF PLATELET-RICH PLASMA PRESENTS FOR INCREASING OSTEOGENESIS IN ORAL SURGERY

Chenchev Iv.
*Department of Oral Surgery, Faculty of Stomatology,
Medical University, Plovdiv*

Preview: The purpose of the following resume is to introduce the effects of using platelet-rich plasma for boosting the bone formation when added to various bone, and bone replacing materials. It also deals with the characteristics of the platelet-rich plasma. Further, a review of many articles dealing with the above-mentioned issue is presented, with the conclusion that adding platelet-rich plasma in bone and bone replacing materials can significantly improve the healing process of bone and gum tissue in the surgically treated area.

Key words: platelet-rich plasma, growth factors, new-bone formation

The purpose of the following survey is to introduce the effects of using platelet-rich plasma / PRP / for boosting the new bone formation. Recently in the field of the contemporary stomatology and particularly in the field of the oral surgery new technologies and materials came in, creating new opportunities in the treatment of the different nozological units.

New bone formation requires sufficient amount of osteogenous cells-predecessors capable of securing the formation of the desired bone. The transplantation field has to

be filled with matrix, which facilitates the attachment and the differentiation of the osteoblastic precursor cells. It is also necessary these cells to be stimulated by growth factors helping the formation of the favourable phenotype cells. /6/ The other critical moment in the formation of a new bone is the formation of new blood vessels /angiogenesis/. /6/ The choice of bone-replacing materials includes autogenic bone, taken from the patient from different parts of the body / close or distant/. They can be cortical and spongy. Allogeneic grafts taken from the same or other person. They are

freeze-dried mineralized bone /FDMB/ and freeze-dried demineralized bone /FDDB/ Xenobone materials are taken from different parts of other species / most common from mammals or from the exoskeleton of a coral/. The alloplastic bone substitutes are synthetically obtained and differ by their crystal size /hydroxylapatites(HA) and tricalciumphosphate ceramics (âTCP)/.

The perfect Bone Replacement Graft Material-BRGM has to have the following features: osteogenesis, osteoinductivity and osteoconductivity. /15/ The osteogenesis is a process in the course of which a new bone is formed