11. Qin R. Diagnosis and treatment of renal trauma 298 patients / R. Qin, P. Wang, W. Qin [et al.] // Clin. J. Traumatol., - 2002, Vol.5, No1, P. 21-23 http://www.nsbi.nlm.nih.gov/pubmed/11835751

12. Sierink J. C. Immediate total-body CT scanning versus conventional imaging and selective CT scanning in patients with severe trauma (REACT-2): a randomised controlled trial / J. C. Sierink, K. Treskes, M. J. Edwards [et al.] // Lancet, 2016, Vol. 388, P. 673-683.

Реферати

ОЦІНКА РЕЗУЛЬТАТІВ ПРОМЕНЕВОЇ ДІАГНОСТИКИ ТРАВМАТИЧНОГО ЗАОЧЕРЕВИННОГО КРОВОВИЛИВУ І ПОШКОДЖЕННЯ НИРОК
Гасимзаде Г.Ш.

Обстежено 94 пацієнта з заочеревною кровотечею і пошкодженням нирки при закритій травмі живота, середній вік - 33,22 ± 3,44 років. У 47,9% постраждалих причиною пошкодження послужило дорожньо-транспортна пригода, у 27,7 - падіння з висоти, у 14,9% - удар в живіт і поясницю і у 9,6% - при спортивному стрибку. Постраждалим виконані УЗД і спіральна КТ. Відразу при надходженні наявність вільної рідини виявлено у 87,2%, на наступну добу - у 9,6% і ще через добу - у 3,2% постраждалих. У 68,1% випадків визначався тип просочування, в 31,9% - тип утворення згустків. При УЗД нечіткі контури виявлені в 100% випадків, неоднорідність паренхімної структури - в 83,3%, збільшення розмірів - в 61,1%, підкапсульні зміни паренхіми - в 16,7% випадків. Більш чітка і об'ємна інформація отримана при спіральній КТ. Таким чином, у постраждалих з підозрою на ЗК та травму нирок УЗД слід виконувати відразу при надходженні і повторно протягом 1-2 діб. Спіральна КТ дозволяє отримати більш точну і чітку картину за очеревинного крововиливу, визначити тяжкість травми нирок і стан структури паренхіми.

Ключові слова: за очеревинна кровотеча, травма нирки, УЗД, спіральна КТ, вільна рідина, ехограма.

EVALUATION OF THE RESULTS OF RADIOLOGICAL DIAGNOSIS OF TRAUMATIC RETROPERITONEAL HEMORRHAGE AND RENAL DAMAGE
Gasimzade G. Sh.

We examined 94 patients with retroperitoneal bleeding and kidney damage with closed abdominal trauma, the mean age of 33.22 ± 3.44 years. In 47.9% of the injured, the cause of the damage was an accident, 27.7% - a fall from the height, 14.9% - a stomach and waist and 9.6% in a sports jump. The sufferers made ultrasound and spiral CT. Immediately upon entering the presence of free fluid were detected in 87.2 per cent, on the next day - at 9.6% and after another day - 3.2% of sufferers. In 68.1% of cases was determined by the type of impregnation, at 31.9% - type of clots. With ultrasound the fuzzy contours detected in 100% of cases, the heterogeneity of the wheat plant's structure - at 83.3%, the increase in size at 61.1%, subcapsular changes of the parenchyma - in 16.7% of cases. More accurate and extensive information obtained with spiral CT. In patients with suspected HCC and kidney injury ultrasound should be performed immediately upon admission and again within 1-2 days. Spiral CT allows more accurate and clear picture of retroperitoneal bleeding, determine the severity of kidney injury and the condition of the structure of the parenchyma.

Key words: retroperitoneal bleeding, injury to kidney, ultrasound, spiral CT scan, free fluid, sonogram.

P.A. Hasiuk, V.B. Radchuk, N.V. Hasiuk, S.O. Rosolovska, A.Ye. Demkovych, A.B. Vorobec
SHEI "I. Horbachevsky Ternopil State Medical University", Ternopil

FIXED PROSTHETIC CONSTRUCTIONS WITH USING OF HIGH VOLUME DIGITAL SCANNING TECHNIQUES

e-mail: gasiukpa@tdmu.edu.ua

In order to determine the depth of preparing hard tissues in creating bevelled classic rounded ledge in the cervical area, the system CAD – volume digital scanner «Arcad Premium» on the unit «CAD / CAM ARCADIA» was modeled an artificial crown and received data about its thickness ledge area, which is 0.845 mm in this clinical case. The second group of observations included cases in which odontopreparation for full metal-ceramic crowns conducted with maximum preservation of cervical hard tissues of the tooth crown – forming the «symbol ledge». To determine the depth of preparation of dental hard tissues when creating a «symbol ledge» in the cervical area, as in the previous case was made unmodeling artificial crown, and obtain data of its thickness in the area of the ledge, which is 0.319 mm in this clinical case. To sum everything up, we can say that the experiment with using the Digital high volume scanning to determine the depth preparation of the experimented teeth by the young dentists, enables more accurate and carefully approach to the rationality of the depth of odontopreparation for non-removable prosthetic constructions.

Key words: Prosthetics, CAD / CAM, the cervical ledge, artificial crown.

A prosthetic dentistry developed many different methods of preparing teeth for metal-ceramic constructions, but the pulp condition during preparation was not taking into account, so there is no informed medical tactics to preserve or extract pulp of abutment teeth [2, 6, 8, 11]. With the aim of studing the functional state of the supporting teeth, a series of analisis proved that the previous preparation and depulpation of abutment teeth for the manufacture of metal prosthesis was incorrect. However, even following the generally accepted protocols of teeth preparation, there is a significant percentage of complications after preparation, because of the improper preparation of abutment teeth. Usually, dentists apply the preparation of abutment teeth without ledge. Also it might be found an excessive removal of hard tissue and creating a large obliquity of walls, which leads to the injuries of pulp [1, 5, 9, 10] and worsen the finished stage of prosthesis fixation. These complications often occur the beginners in dental prosthetic dentistry due to the lack of

experience and inadequate position in assessing the clinical situation.

Research purpose – to determine the depth preparation of the examined teeth with high volume digital scannig.

Material and methods. To identify morphological changes of hard tissue of examined vital teeth with using a various types of odontopreparation with full metal-ceramic crowns, it was studied 6 premolars of the upper and lower jaws of patients aged between 18 to 29 years. The material was divided into two research groups. As a control group was taken the average data standards of morphology and functional characteristics of the pulp and dentine with appropriate functional group of the teeth. The experiments were conducted on the same teeth of a jaw from different sides. The first experimental group included cases where odontopreparation of premolars was done with the creation of the classic rounded beveled ledge in the cervical part, the second group – the cases in which odontopreparation of the premolar crowns conducted with maximum preservation of cervical crown (symbol of the ledge).

In order to improve the accuracy of the depth preparation of tooth stump, was used the technology of high volume digital system scanning CAD / CAM – Computer Aided Design / Computer Aided Manufacturing. Produced collapsible gypsum models for each clinical case and scanning system CAD – digital surround scanner «Arcad Premium» on the unit «CAD / CAM ARCADIA». With that technology for 3D models was determined the exact depth preparation of tooth stump [23, 4, 7].

Results and its discussion. Through digital high volume scanning of gypsum models with prepared teeth of the first research group confirmed that the average depth preparation with classic beveled rounded ledge from 0.6 to1.0 mm in different clinical situations (Fig. 1). In order to determine the depth of preparing hard tissues in creating bevelled classic rounded ledge in the cervical area, the system CAD – volume digital scanner «Arcad Premium» on the unit «CAD / CAM ARCADIA» was modeled an artificial crown and received data about its thickness ledge area, which is 0.845 mm in this clinical case. The second group of observations included cases in which odontopreparation for full metal-ceramic crowns conducted with maximum preservation of cervical hard tissues of the tooth crown – forming the «symbol ledge». To determine the depth of preparation of dental hard tissues when creating a «symbol ledge» in the cervical area, as in the previous case was made unmodeling artificial crown, and obtain data of its thickness in the area of the ledge, which is 0.319 mm in this clinical case (Fig. 2).
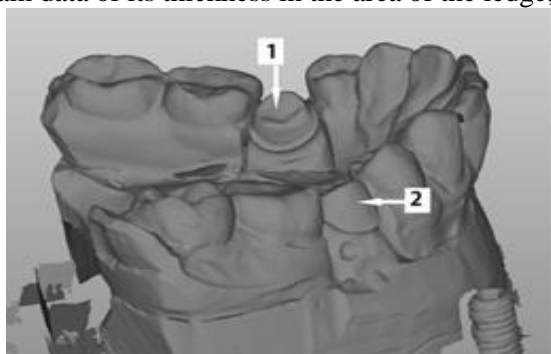

Fig. 1. Scanned model of teeth preparation with different types of cervical ledge area: 1 – preparation of stump tooth with a classic method of creating bevelled rounded ledge in the cervical area; 2 – preparation with the creating of «symbol ledge» in the cervical area.
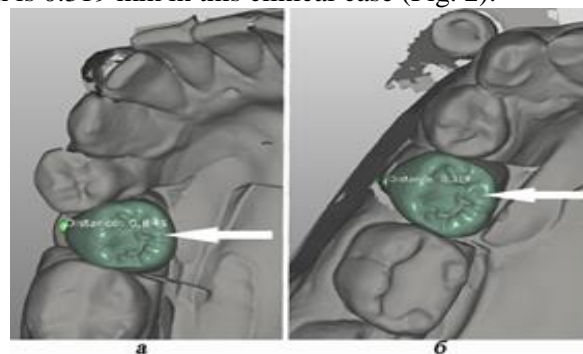

Fig. 2. Modeling of prepared artificial tooth crowns and determine the depth of the ledge. a) – first clinical case, the classic rounded angled ledge; b) – the second case, the symbol of the ledge.

Conclusion

We can say, that the experiment with using the digital high volume scanning to determine the depth preparation of the experimented teeth by the young dentists, enables more accurate and carefully approach to the rationality of the depth of odontopreparation for non-removable prosthetic constructions.

References

1. Abolmasov NG., Abolmasov NN., Kovalkov VK. et al. Dental depopulation in the oral preparation system for prosthetics – is it necessary and / or iatrogenic? Inst. of Dent. – 2012; 2: 28-31.

2. Amaral FR., De Andrade MF., Saad JR. et al. Functional and esthetics prosthetic rehabilitation in the elderly patient with metal ceramic crowns. Scien. J.of Dent. 2015; 2: 42-45.

3. Alqahtani F. Marginal fit of all-ceramic crowns fabricated using two extraoral CAD/CAM systems in comparison with the conventional technique. Clin Cosmet Investig Dent. – 2017; 9: 13-18

4. Contrepois M., Soenen A., Laviole O. Marginal adaptation of ceramic crowns: a systematic review. J. of Prosth. Dent. 2013; 6: 447-454.

5. Davidovich G., Kotick PG. The use of CAD/CAM in dentistry. Dent. al clin. of North Amer. 2011; 55: 559-570.

6. Dhima M., Paulusova V., Carr AB. et al. Practice-based clinical evaluation of ceramic single crowns after at least five years. J. of Prosth. Dent. 2014; 2: 124-130.

7. Golik VP., Dyudina IL. Impact of operations for preparation of hard tissues of the tooth pulp in the treatment of non-

removable prosthetic constructions. Bullet. Probl. of biol. and med. 2013; 4: 11-13.

8. Gasiuk PA., Radchuk VB., Kalashnikov DV. Features of morphological changes of dental hard tissues after odontopreparation. Clin. Dent. 2014; 3: 8-11.

7. Gasiuk PA., Radchuk VB., Brekhlichuk PP. et al. The influence of orthodontics preparation for the unfixed orthodontic constructions on the tooth pulp from the point of view of morphology. Intermed. J. 2015; 3: 39-43.

10. Hazhva SI., Pashinyan GA., Alyoshin AA. Analysis of mistakes and complications in prosthetics with the use of permanent orthopedic structures. Stomatology. 2010; 2: 7-8.

11. Schnebelen A., Sweat K., Marshall J. et al. Alleviation of Ig M monoclonal protein interference in nephelometric assays by sample treatment with reducing agent in a chaotropic salt solution. Am. J. Clin. Pathol. - 2012; 137 (1): 26-28.

Реферати

ПРОТЕЗУВАННЯ НЕЗНІМНИМИ ОРТОПЕДИЧНИМИ КОНСТРУКЦІЯМИ З ВИКОРИСТАННЯМ ТЕХНОЛОГІЇ ЦИФРОВОГО ОБ'ЄМНОГО СКАНУВАННЯ
Гасюк П. А., Радчук В. Б., Гасюк Н. В., Росоловська С. О., Демкович А. Є., Воробець А. Б.

Стаття присвячена вивченню функціонального стану опорних зубів. Ряд досліджень довів, що глибоке препарування та депульпування опорного зуба для виготовлення металокерамічного протезу не є раціональною. Матеріал був розділений на дві дослідні групи. В якості контрольної групи були взяті середні дані стандартів морфології та функціональних характеристик пульпи і дентину відповідної функціональної групи зубів. Підсумки даного дослідження дозволяють стверджувати, що експеримент із використанням цифрового об'ємного сканування для визначення глибини одонтопрепарування в ділянці уступу, дозволяє більш точно та ретельно підійти до визначення глибини препарування опорних зубів для незмінних конструкцій зубних протезів.

Ключові слова: Протезування, CAD / CAM, уступ, металокерамічна штучна корона.

Стаття надійшла 2.08.2017 р.

ПРОТЕЗИРОВАНИЯ НЕСЪЕМНЫМИ ОРТОПЕДИЧЕСКИМИ КОНСТРУКЦИЯМИ С ИСПОЛЬЗОВАНИЕМ ТЕХНОЛОГИИ ЦИФРОВОГО ОБЪЕМНОГО СКАНИРОВАНИЯ
Гасюк П. А., Радчук В. Б., Гасюк Н. В., Росоловская С. А., Демкович А. Е., Воробец А. Б.

Статья посвящена изучению функционального состояния опорных зубов. Ряд исследований доказал, что глубокое препарирование и депульпирования опорного зуба для изготовления металлокерамического протеза является не рациональной. Материал был разделен на две исследовательские группы. В качестве контрольной группы были взяты средние данные стандартов морфологии и функциональных характеристик пульпы и дентина соответствующей функциональной группы зубов. Итоги данного исследования позволяют утверждать, что эксперимент по использованию цифрового объемного сканирования для определения глубины одонтопрепарирования в области уступа, позволяет более точно и тщательно подойти к определению глубины препарирования опорных зубов для постоянных конструкций зубных протезов.

Ключевые слова: Протезирование, CAD / CAM, уступ, металлокерамическая искусственная корона.

Рецензент Аветіков Д.С.

I. I. Grynko, O. M. Borysenko
SI "Institute of Otolaryngology named after prof. O. S. Kolomiychenko NAMS of Ukraine", Kyiv

COMPARATIVE CLINICAL AND AUDIOLOGICAL CHARACTERISTICS OF THE AUDITORY ANALYZER CONDITION IN PATIENTS WITH CHRONIC TUBOTYMPANIC OTITIS MEDIA

e-mail: igrynko@yandex.ua

At a frequency of 8.0 kHz in patients with a teflon tube (T/tvt) - the magnitude of this indicator increases in the first 3 months after surgical intervention, and then gradually decreases after 6 and 12 months after the operation, and in patients with a silicone tube (T/svt) - practically does not change during all time after surgical intervention. The dynamics of thresholds for the perception of bone-carved sounds at different frequencies in patients with T/tvt after surgery is in most cases of a multi-directional nature. In patients with T/svt, the perception of bone-carved sounds at a frequency of 4.0 and 8.0 kHz increases in the first 3 months after surgical intervention, with subsequent preservation of its level until the 12th month after surgery. The dynamics of bone-air intervals at frequencies of 0.5 and 1.0 kHz in virtually all groups of patients with CTOM (except for T/tvt at a frequency of 1.0 kHz) after surgery has a similar nature - a gradual decrease with an increase in time after surgery (3 – 6 – 12 months), and the most pronounced decrease is observed in the first 3 months. At the frequency of 2.0 and 4.0 kHz, in most groups of patients with CTOM, the most pronounced reduction of bone-air intervals is noted not only after 3 months, but also in the interval from the 3rd to the 6th month. At a frequency of 8.0 kHz, the gradual decrease in the value of bone-air intervals with the increase in time after surgery is observed in the group of patients with T/svt, in patients with T/tvt its magnitude increases after 3 months after surgery, and in the interval between the 3rd and in the 6th months it decreases and then practically does not change.

Key words: chronic tubotympanic otitis media, mpanoplastic, vent tube.

Among the diseases of otolaryngology organs, treated stationary, the frequency of chronic purulent otitis media is 20-25% [10] and may cause disability in patients with deafness and the development of such intracerebral complications as meningitis, encephalitis, brain abscess, sigmoid sinus thrombosis, etc. [2, 9, 15, 18]. In patients with a sufficient function of the auditory tube after eliminating the inflammatory process in the area of the middle ear, nose and nasopharynx, the predictions of surgical