TACTICS OF REHABILITATION UNDER A COMPLETE ADENTIA

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The article represents a scientific foundation of optimal prosthesis' constructions with usage of tooth implantation.

In almost all countries dental pathology remains one of the most spread. Teeth loss is reflected in an overall health condition of a man (Kalininskaya A.A, Sadikov M.K., Kunitsyna N.M. 2012).

One of the prior objectives of planning dental orthopedic treatment is selection of prosthetics technology. We should clearly define in what cases implantation for fixing removable implants should be implemented, when it is reasonable to carry out non-removable prosthetics with usage of cement, and when one should construct conditionally-removable implants.

It is necessary to pay an increased attention to introduction of adequate orthopedic methods of treatment for persons with a complete teeth loss who need modern constructions of teeth implants in order to restore chewing function.(A.V. Aimkiy, 2012).

The objective of this research is a scientific approval of selecting prosthetics tactics under a complete adentia.

Central scientific-research institute of stomatology and maxillary-facial surgery of the Ministry of healthcare of RF served as a research base.

In order to select a prosthetics method under a complete adentia we can use the following criterions:

1. Removable prosthetics with fixing on implants can be used in case when a patient has already used a tooth implant, but, due to an atrophy and worsening of terms for anatomic retention, fixing became unsatisfactory.

2. If a patient hasn't used removable implants, implantation for fixing removable implants should not be planned as a priority.

If, due to any reasons, removable prosthetics and fixing with implants is considered as a the most favourable treatment method, it reasonable to construct a removable implant first and give a patient 3–4 months for adaptation, besides, this decision should be conscious; further treatment with implants can lead to the desired result. Otherwise, there is a significant risk of that a patients will not be able to adapt to a removable implant, even if its fixing is provided reliably with implants and locks.

3. Non-removable and conditionally-removable prosthetics are the most rational approaches for a functional and social rehabilitation of patients with a complete adentia. These approaches can be implemented practically in all cases, even under unfavourable anatomic-topographic conditions due to a significant maxillary atrophy. Nowadays there is a sufficient arsenal of surgery methodics and technologies of making teeth implants for carrying out implantation and non-removable or conditionallyremovable prosthetics under a complete adentia.

4. Non-removable prosthetics can be reasonable on nonseparable implants, when there is a possibility for a direct functional strain, in other words, prosthetics after 7-10 of implantation.

However, non-removable prosthetics cannot be considered as a main, most favourable approach.

We should consider the fact that fixing implants with cement does not give us a possibility to manoeuvre in case of problems. For example, recementing on an implant can lead to a functional overloading of bone tissue that surrounds other implants. Such implant should be knocked off and re-cemented. However, knocking off an implant, fixed with a cement on other implants (as well as on teeth) can lead to a dislocation or even removal of implants that were not re-cemented. Therefore, non-removable prosthetics can be used in cases when it is impossible to use conditionally-removable implantation. Clinic situations when conditionally-removable prosthetics represents significant complications, we can observe:

• under a significant vestibular inclination of alveolar sprouts and placed implants in combination with insufficient inter-alveolar space for placing inclined heads. In such situation screw vints and holes that fix an implant can appear on vestibular side of the implant even with usage of inclined heads of implants that is unacceptable from an aesthetic point of view;

• under protrusive bite, when there is no place for fixing screw vints. Such situation can be observed under an adentia of lower jaw and presence of one or several teeth in frontal department of upper jaw.

5. Conditionally-removable prosthetics can be considered as an optimal method of rehabilitating patients with a complete adentia. Such variant can be realized in a suppressing number of cases, even under a significant atrophy of bone tissue of jaws and unfavourable anatomic-topographic conditions.

Thus, while planning treatment of patients with a complete adentia we can implement the following approaches and their sequence:

a) conditionally-removable prosthetics on twostage implants of screw or cylindrical shape as an optimal method of treatment;

b) non-removable and combined prosthetics on one- and two-stage implants of different shape as an additional way of treatment;

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c) making complete removable teeth prosthetics with their fixing on two-stage implants of screw of cylindrical shape as a palliative method of treatment.

Apart from planning a final, constant prosthetics of patients with a complete adentia one should also solve the problem what a patient will do and how he will live during 2–3 months, and sometimes more time, while the process of reparative regeneration of bone around the placed implants is underway. Many patients cannot and don't want to be placed in social isolation due to lack of teeth, disturbance of speech and appearance. Therefore, while planning treatment, if a patient desires, one should consider temporal prosthetics that would allow the patient to restore speech function and correct facial features, and at least a partial chewing function.

References

1. Kalininskaya A.A, Sadikov M.K., Kunitsyna N.M. Organization forms of prevention in dentistry // European journal of natural history. – 2012. – № 6.– P. 13–14.

2. Alimskiy A.V. Gerontostomatology // Moscow, Federal State institution Central scientific-research institute of stomatology and maxillary-facial surgery.

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TECHNOLOGIES OF ORTHOPEDIC TREATMENT WITH IMPLANTS IN DENTOLOGY

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The article represents a scientific foundation of optimal prosthesis' constructions with usage of tooth implantation.

High rates of worsening in dental health of the population, significant increase in teeth loos frequency, disturbance of occlusion find a reflection in general level of dental health of the population (A.A. Kalininskaya, L.M. Aliyeva, A.E. Ivanova, 2012).

Dental implantation is used quite efficiently for restoring dental function (A.V. Alimskiy, 2012).

Plan of technologies of orthopedic treatment using implants should define a sequence of implants' loading in earlier and later terms. A possibility to define initial anatomic-topographic terms of implantation, optimal prosthesis period, and reasonability of facilitating a certain methodic of surgery and prosthesis construction emerges.

The objective of this research is clinical foundation of optimal constructions of prosthesis using teeth implantation.

Federal State institution Central scientific-research institute of stomatology and maxillary-facial surgery of Ministy of healthcare of RF served as a research base.

A final selection of prosthesis method, construction, and methodic of placing implants is made according to a balance of the mentioned factors in each specific situation.

Thus, if definition of a volume of bone tissue gives us information on which implant we can use, type of adentia and type of maxillary bone architectonics, and also prosthesis construction predetermine what implant should be used in a specific clinic situation.

Naturally, factors that define prosthetic method and type of implants should serve as a premise in planning treatment. A volume of the possessed bone can be considered as a secondary factor that defines initial conditions, needed for implantation. Bone volume is a variable value, as concepts «sufficient» of «insufficient» implies different qualitative characteristics for different types of adentia and prosthetic methods. For example, bone tissue height of 10,0 mm and its width of 3,5-4,0 mm in the area of lacking corner tooth is insufficient for placing an implant and further fixing of tooth on the implant itself, as in such clinic situation, an implant 10,0 mm high and 3,5–4,0 m in diameter should be used. At the same time such bone volume cannot be considered as an unfavourable anatomic premise for implantation for some different types of adentia.

Inadequate volume of bone tissue cannot serve as a sufficient foundation for denying implantation or using a different type of implant, usage of which is unreasonable in a certain clinic situation. In order to create adequate anatomic-topographic conditions direct regeneration and bone transplantation, methods of distraction osteogenesis, can be utilized.

Apart from defining optimal prosthesis construction, type, size, and amount of implants, needed for realizing an acceptable prosthetics, a tactics of introducing surgical stage of treatment should be developed.

Besides, first of all, it is necessary to define implantation method and period of removing implants from functional loading in a certain clinic situation.

One-stage methodic of placing implants wit early functional loading can be used for types I and II of bone architectonics and anatomic-topographic conditions, favourable for implantation:

• sufficient volume of bone tissue, adequate alveolar and inter-occlusion height, normal bite;

• presence of conditions for careful adaptation of surgery wound edges in implant area;

• lack of evident risk of inflammatory processed in oral cavity during post-operation period (periodontitis).

In other cases two-stage method of implantation should be preferred.

Factors that influence period of removing an implant from function are: type of architectonic, variant of placing implant in relation to compact bone layer, and anatomic situation.