Complete removable prosthetics is one of the most difficult types of treatment in orthopedic dentistry, which is associated with profound violations of the anatomical and functional relationships in the dental system. Dentistry today is high technology and precision technology, but as for removable plate prosthetics, the successes of practical dentistry are less significant. No other type of orthopedic treatment is associated with so many diverse and contradictory theories, opinions and proposals. The improvement of methods and technologies in this area of dentistry is hampered by the lack of a fundamental basis that guarantees positive treatment results. According to I.K. Lutskaya [7], 5.6% of Belarusians aged 50-59 years are completely missing teeth; 60-69 years old - 9.9%; 70-79 years old -29.5%; after 80 years - 40.2%. Among them, 29.9% have prostheses and use them, 18.4% do not use them due to poor fixation. In old age, the number of patients with complete secondary adentia, according to Borisenko L.G. [3,4], is 15%. Of the total number of removable dentures, 24.4% are full dentures [2]. 55% of 60-year-old patients require re-production of prostheses [1]. The idea of old age as a negative, unproductive and useless phase of life, when a person is no longer so important to society, needs to be completely reconsidered. Epidemiological, social and psychological studies reveal the complex, multifactorial nature of human diseases, their main trends and frequency, suggesting that socio-economic, psychological status and lifestyle, environmental influences, geographic region of residence and insufficient access to dental care in childhood, personal The experience of communicating with a doctor contributes to the development of major dental diseases that cause tooth loss and cause premature aging. Features of diseases in older people caused by the very nature of aging include: multiple pathological conditions, nonspecific manifestations of diseases, rapid deterioration of the condition if treatment is not provided, high frequency of complications, and the need for rehabilitation [2]. According to WHO, up to 26% of patients after prosthetics with complete removable dentures do not use them for various reasons. An analysis of the unsatisfactory results of orthopedic treatment of patients with complete absence of teeth made it possible to identify the main factors due to which patients do not use dentures [8]: anatomical and physiological; clinical technology; psychological; toxic-allergic; combined. The reasons for repeated prosthetics in the long term are most often the inability to use prostheses 145 due to poor fixation; deterioration in chewing efficiency due to abrasion of plastic teeth; decrease in the height of the lower third of the face, leading to a decrease in the volume of the oral cavity, which is manifested by a feeling of awkwardness and fatigue of the tongue during a conversation; impaired speech clarity; pain in the area of the temporomandibular joints; violation of aesthetics. As reasons dictating the need to replace dentures, as a rule, subjective data about the difficulty in using dentures by patients are cited; morphofunctional changes in the masticatory apparatus are much less often indicated. There is an obvious need for further research to determine criteria on the basis of which the question of re-prosthetics could be objectively raised. At the same time, it is necessary to take into account the changes occurring in the prostheses themselves, which can lead not only to a decrease in their functional value, but also to the acceleration and intensification of ongoing processes. Prosthetics has another feature. We mean the psychophysiological side of the issue: patients who use removable dentures for a long time develop persistent habits, the more difficult they are to change the older they get. Some patient requests are due to long-term habits and will bring success to treatment, i.e. will increase the effectiveness of prosthetics, and sometimes prevent failures. The complete absence of teeth leads to poor health, up to the final loss of a vital function of the body - chewing food, which affects the digestion process and the supply of necessary nutrients to the body, and also causes the development of diseases of the gastrointestinal tract. Impaired diction affects the patient’s communication abilities; these impairments, together with changes in appearance due to loss of teeth and developing atrophy of the masticatory muscles, can lead to changes in the psycho-emotional state, causing mental disorders. The absence of teeth becomes one of the reasons for the development of complications such as dysfunction of the temporomandibular joint and the corresponding pain syndrome. Prosthetics for patients with complete absence of teeth presents a big problem in creating prostheses that are functionally and aesthetically complete. Treatment of such patients

ov, ultimately, is aimed at the general improvement of a person, at prolonging his active period of life. The preservation of teeth and the full functioning of the masticatory apparatus are criteria for human health that ensure a full quality of life. Missing teeth or poor-quality dentures significantly reduce the quality of life [3,4]. The manufacture of removable dentures is one of the most complex types of orthopedic treatment, which requires high professionalism of the doctor and dental technician and the use of modern technologies. 25% of the total number of removable dentures manufactured in dental laboratories are removable dentures in the absence of teeth. The large proportion of these structures indicates that patients with complete absence of teeth often repeatedly seek repeated prosthetics due to the unsatisfactory quality of the dentures [5]. This is confirmed by literature data [8], according to which 20-27% of patients with complete removable dentures do not use them, and 53% use them only for aesthetic purposes, i.e. every 4 patients who received a prosthesis do not use it at all due to unsatisfactory quality or poor fixation in the oral cavity. The data presented indicate the relevance of the problem of restorative treatment of patients with complete absence of teeth. The technique of duplicating dentures arose in response to age-related changes in a group of people with complete loss of teeth. Many of the patients in need of new dentures are elderly, their teeth have been lost for a long time, and the conditions for re-prosthetics with complete removable dentures are assessed as poor. Patients in this group are often completely unable to adapt to new prostheses, which differ significantly from the previous ones in design features, and the duplication technique makes it possible to minimize differences in the design of old and new prostheses. Indications for the use of the duplication technique: - elderly patients who have used complete removable dentures on the upper and lower jaws for a long time and were satisfied with them, but currently note poor fixation of the dentures and their wear; - patients who have a history of poor adaptation and problems with the use of removable dentures, if they are shown making copies of the most successful previous dentures with controlled changes made to the design; - previously made immediate dentures, in cases where their replacement is necessary due to bone resorption after tooth extraction; - production of new dentures with restoration of interalveolar height and preservation of the previous shape of the base and size of the teeth; - production of a new prosthesis in case of frequent breakdowns of the old one (cracks, fractures of the base); - the patient’s desire to have several absolutely identical prostheses. The production of complete removable plate dentures using the generally accepted method includes 9 stages, and the duplication method we proposed consists of a smaller number of clinical and laboratory stages (5), which allows optimizing orthopedic treatment for repeated prosthetics in patients with complete absence of teeth. Clinical stages: examination of the patient, diagnosis, determination of the treatment plan and choice of prosthesis design, study of old dentures in the oral cavity and outside it, duplication of existing dentures, obtaining functional impressions under chewing pressure and in the central relationship of the jaws; checking the wax structure of prostheses; fitting and application of prostheses. Laboratory stages: casting models, making a wax base, setting up artificial teeth; final production of dentures (replacing wax with plastic). After examination, diagnosis, drawing up a treatment plan, studying old dentures, we begin duplication. We use our specially adapted cuvette (patent No. 2567) for duplicating Figure 1. The cuvette for duplicating dentures is detachable and consists of two parts: a base and an upper part. The base of the cuvette is equipped with two rods with screws on opposite sides and a guide groove, as well as a corresponding recess in the upper part for tightly connecting the parts of the cuvette. The sequence of working with the cuvette is as follows: first, it is opened, the lower part is filled with alginate, silicone or hydrocolloid mass and half of the old denture is immersed in it with the part that is adjacent to the mucous membrane. After the mass in the lower part of the cuvette has hardened, we also add a duplicate mass into the upper part, match both parts, use two screws to tightly connect the two parts of the cuvette and wait for the duplicate mass to harden. Then, after some time, we open the cuvette and remove the old prosthesis (Figure 2), and fill the vacated volume depending on the goals: with wax, thermoplastic mass or self-hardening plastic. Figure 1. Cuvette for duplicating B by

power to the practitioner 146 mass. After polymerization of the plastic, open the cuvette and remove the duplicated prosthesis, as shown in Figure 3. Next, we carry out the necessary grinding and polishing. Next, we fit the duplicated dentures in the oral cavity, specify the occlusal contacts, and correct the boundaries of the dentures using thermoplastic mass, Figure 4. To obtain functional impressions, we mix the silicone correction mass and apply it to the inner surface of the dentures. We insert the dentures into the oral cavity, apply an occlusion fixative to the chewing surface and ask the patient to close his mouth, so we obtain a functional impression under individual chewing pressure and in the centric relation of the jaws, characteristic of each of our patients with complete absence of teeth, Figure 5.6. The next stage is laboratory. In a dental laboratory, a dental technician casts working models, plaster them into an articulator or occluder, and then sets the teeth along the individual occlusal surface of one of the dentures. These manipulations are presented below in the proposed figures 7,8. Next is the clinical stage - checking the wax structure of the prosthesis in the oral cavity. This is a very important and responsible moment, since at this stage the results of all previous clinical and laboratory stages of manufacturing complete removable dentures are assessed and the necessary changes can still be made. The stage is carried out according to the usual rules, Figure 9. After checking the design, we move on to the laboratory stage - the final production of dentures (replacing wax with plastic) Figure 10. Clinical stage - fitting and application of dentures in the oral cavity Figure 11. At this stage, we apply dentures if necessary correction of newly manufactured complete removable dentures, and also provide the patient with detailed information on the rules for using and caring for them. We definitely talk with the patient about the timing and need for timely subsequent prosthetics. During re-prosthetics, the patient receives new prostheses identical to those he used previously. Using the technique of duplicating complete removable dentures during re-prosthetics allows you to avoid or reduce the problems of adaptation to newly manufactured dentures, which are slightly structurally different from the dentures made during the initial application for orthopedic help Figure 12. The advantages of this technique include: -reduced treatment duration due to reduction of clinical and laboratory stages of manufacturing complete removable dentures; - quick adaptation to complete removable dentures by making a denture similar to the previously manufactured one; -reducing the cost of treatment due to a reduction in manufacturing steps and treatment time in an orthopedic dentistry clinic.