



“The main technological processes for the  
manufacture of removable and non-removable  
denture structures”

Module 1.

Lecture 3.

Introduction to subject

“ Propedeutics of orthopedic Stomatology ”

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## PLAN of the lecture

1. Kind of unfamiliar and familiar prostheses.
2. Classification of unfamiliar and knowledgeable prostheses.
3. Positive and negative power of unfamiliar prostheses.
4. Technological stages in the preparation of small prostheses.
5. Positive and negative power of prosthetic devices.
6. Technological stages in the preparation of auxiliary prostheses.
7. Basic and additional materials for the preparation of small and familiar prostheses.

- ▶ Understanding the "don't know prosthetics" can only be done, all the elements are installed in the empty company of the patient for a trivial term and do not require regular knowledge for a glance.
- ▶ See dentures
- ▶ Dentures are known and not known.
- ▶ Unsignificant dentures are fixed with a doctor on the teeth for a trivial term. The smell is metallic (steel, medium, gold, platinum, etc.), Combined (for example, metal and plastic on the faces of crowns and teeth), plastic, ceramic and metal-ceramic. There can be single crowns and single-piece teeth or bridge-like prostheses, which can be attached to the teeth behind the additional crowns. All the stench rises, in front of, aesthetic powers and prices. Plastic is shy more, because it seems to be a bit overwhelming if you need prosthetics for a few hours.

- ▶ Unimportant dentures change the function of the teeth more beautifully, less knowledge, and sometimes more anatomical and physiological reasons for the lesser communication. I will reduce the appearance of the cracks on the surface of the cracks, I will reduce the supporting function, which is necessary for the wet teeth.
- ▶ Unimportant dentures are fixed on the teeth for a trivial term. Price - single crowns or bridge-like prostheses (a number of crowns), such as teeth, which need to be turned to a singular shape. It's a good idea, if you don't know the dentures of the teeth, there is a need for depulping, so that you can see the nerves from them, the protest technology allows you not to depulp the teeth. During that period of one hour, while the crown or bridge-like prosthesis is being removed, the teeth are fixed on the teeth.



## Metal ceramics

orthopedic design e metal ceramics. The frame of the metal-ceramic prosthesis is made of chromium-cobalt alloy. The names of metal ceramics are covered with mint and high-aesthetic ceramics. Yak frame can be a road alloy made of gold and platinum - this is the name of "ceramics on gold", which, however, does not follow the power of chrome-cobalt.

The technology of making metal-free ceramics (VIP class category) is actively being used for the production of metal-free ceramics. Metal-free ceramics, a crown, are made from a solid ceramic mass, to be made with the maximum aesthetics while preserving the high functional powers that are necessary for the health of women and for those who want to stay.

The main view of metal-free ceramics is "live blisk", since it is practically impossible to see the call from living teeth. It is necessary to note that crowns from metal-free ceramics should be more expensive, lower designs from metal-ceramics. It should be seen as a result of the fact that the kind of unfamiliar prostheses are prepared for a high-tech and expensive possession. It is recommended to install on the tabs in case of crown drops from metal-free ceramics, prepared from the same material. Overshoot of such tabs for porous and metal-ceramic ones is the performance, visibility of oxidation processes, and also the reliability.



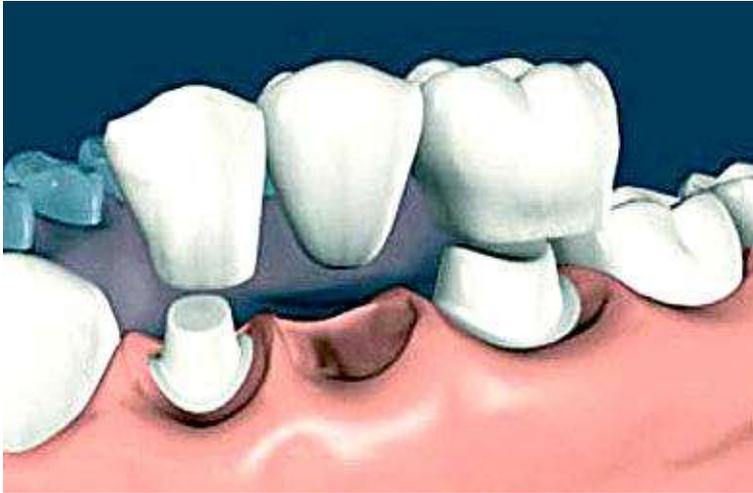
- ▶ Check out these types of post-orthopedic prostheses:
- ▶ 1. Bridge-like prostheses, which are stored with crowns, which fix on the preserving articulated teeth, and the intermediate part, which closes the defect on the center of the outer tooth. In case of new design, it should be raised according to all design. Prostheses of this type may have a number of types: suction-molded metal (the most simple and available), from stamped metal crowns with combined metal, metal-ceramic and metal-plastic, plastic, adhesive (special to be fixed)

- **Pertains to the restoration or replacement of teeth with artificial substitutes that are attached to natural teeth, roots or implants that are *not* readily removable from the mouth.**

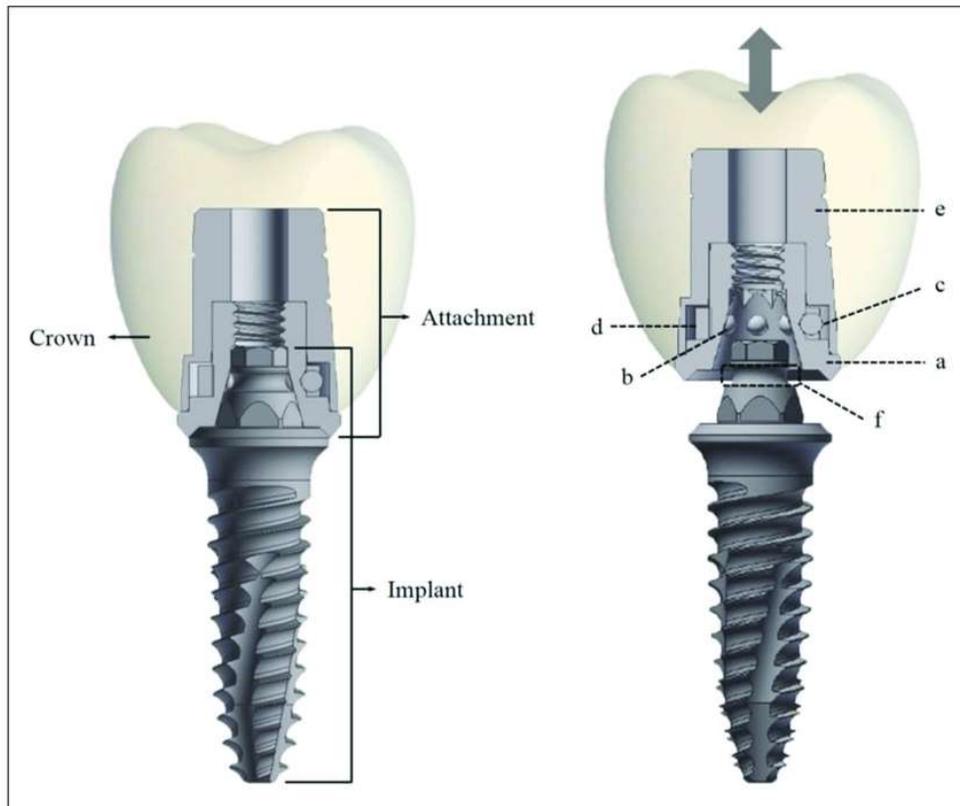




# fixed denture



Prosthetics on implants - a titanium root is implanted into the cyst tissue of the slit, on which the crown is fixed from plastic or metal ceramics





Single crowns - option, if the size of the part of the tooth is rounded, along the root of the structure, suitable for orthodontic construction.

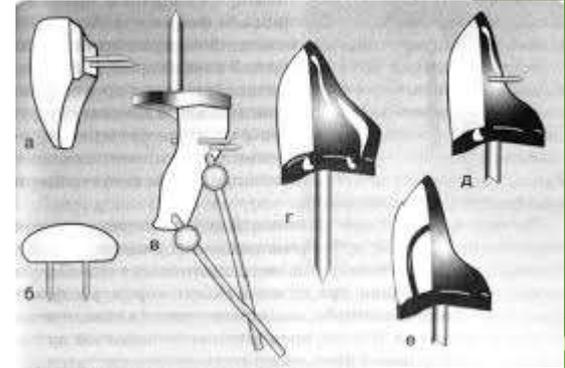
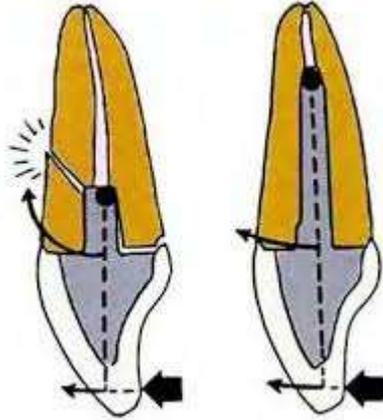
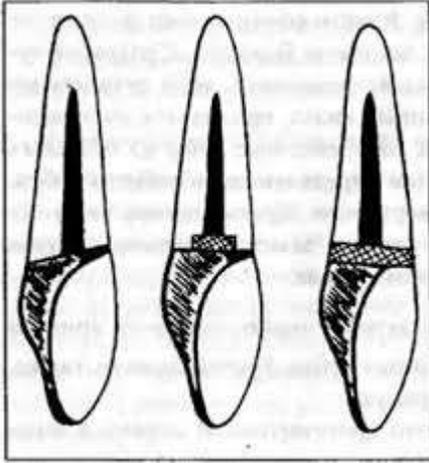
Veneers- ceramic plates, which are attached to the front surface of the tooth.



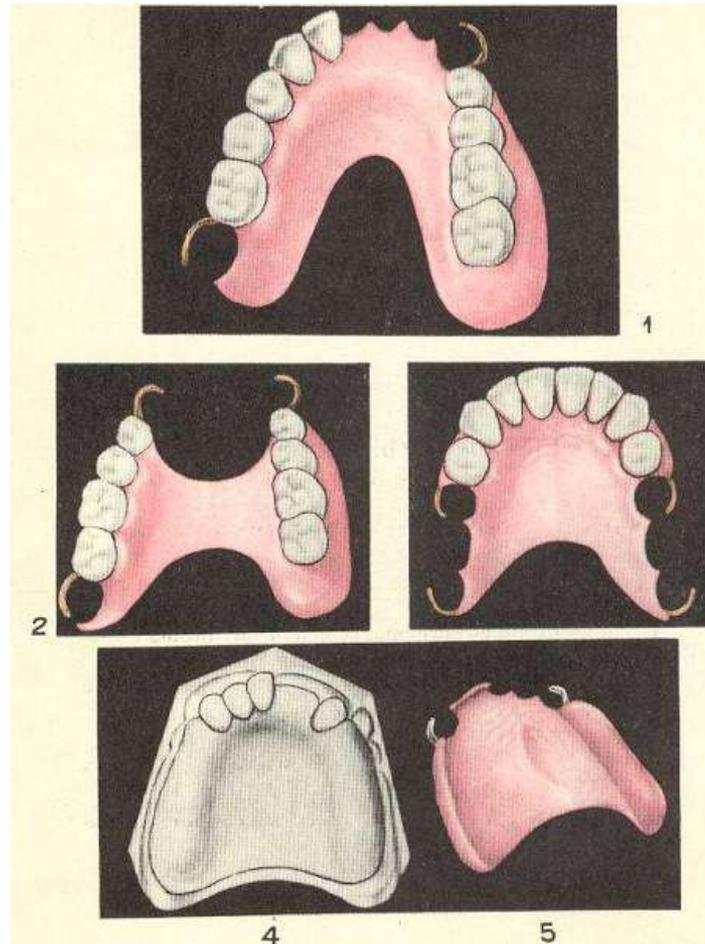
- ▶ Inlays In case of a slight rupture of the jaw teeth, it is recommended, if possible, to save the teeth of the tissue and replace the crowns, to replace the inlays. This technology is called microprosthetics for additional tabs. If you have prepared tabs from high-quality metal-free ceramics, you will not see the names of new tissues of the tooth and will serve you better, no more filling. Ceramics of Volodya have physical powers, similar to the tissues of living teeth, that is why they choose to find new children.
- ▶ Pins design. Inadvertent changes in the overall visibility of the crown of the tooth as a result of injuries or carious rupture, breakage with the knowledge of the bridge-like prosthesis. At the same hour, the roots of the sharpened teeth are able to reach the masses and not the enemies, like the periodontium. Viktoristovuchi tsi roots can not be included in the design of the handrail roztastovannyh intact teeth, since they themselves do not damage their integrity and aesthetics.
- ▶ A small denture is called a pin tooth, which replaces the crown of a natural tooth and fixes it in the root canal behind the additional pin.

# Pin designs

## Pin teeth



- ▶ Familiar prostheses can be used for a group and a group:
- ▶ More knowledge of plastic plate parts of prostheses;
- ▶ Partly known prostheses: plastic plate parts for prostheses, plastic plate parts for implant prostheses, clasp prostheses, sector symbols or segments of the dentition



- ▶ Mind-knowing prostheses.
- ▶ Lamellar prostheses are made entirely of plastic. For a prosthesis to make a lightweight, remarkably easy to use, remarkably cheap, and it is also easy to transform if necessary the term of the service of the encirclement, the loan in the empty company is to complete the rich task and the spiral is clear again. True, in case of a time-based denture of teeth, such a prosthesis is simply irreplaceable.
- ▶ Designed for the renewal of fragments in the dentition i the most simple and available at the price of a significant orthopedic design. The prostheses of this design spiral with their base on the ash surface and fit into the mouth of the auxiliary clasps (metal slips) for the extreme to the defect of the supporting teeth. The supporting teeth can be covered with crowns, or they can be replaced without them.
- ▶ The clasp of such prostheses is designed to be made from a springy dart made of stainless steel or noble metal. The smell of the abutment tooth is smelled, the prosthesis is reliably fit in an empty company before an hour is taken and when it is raised. The clasp of the prosthesis will be flattened, the root of the tooth will be straightened, and it will be practically uncomfortable to feel it.
- ▶ Partly plastic prostheses can be used without clasps. In general, it is important for them to serve visually uncomfortable constructions - attachments



- ▶ Immediate prosthetics
- ▶ Immediate prostheses are a type of notable partial plastic prostheses. Victory in the quality of the clock design at the same time as the teeth are visible and in the clock situations.
- ▶ When preparing clasp prostheses in the dental laboratory, an accurate design and modeling of all non-porous and brittle elements of the prosthesis should be performed. The basis of the clasp prosthesis is the metal frame is an arc with fastening and functional elements, on which a plastic basis is used with piece teeth. The metal frame of the clasp prosthesis is individually made and prepared by the method of casting from supermachine chrome-cobalt, titanium or gold-platinum alloys. The quality of metal allows the maximum speed of production, coverage and back of the prosthesis. Bezposeredno arc, so close the right and left sides of the clasp prosthesis, zvivayut roztashivayutsya in the special mice emptying the company, do not cause discomfort for the thigh owner.
- ▶ Clasp prostheses, as well as partial plastic prostheses, can be fastened to the teeth with clasps and locking fasteners (attachments). Alle on the view of plastic prostheses, in which the dentures can be modified, in Bugeli there can be locks just for fantastic technical solutions, but you can give the prosthetics comfort





- ▶ In case of clasp prostheses with clasps, the supporting teeth are recommended to be closed with crowns. With vicious attachments of the supporting teeth, they are closed with crowns. So, like a clasp not just trim for the abutment tooth, but re-positioned on a new part of the jaw vise, two or, more often, three teeth are closed with crowns from the side of the end defect in the dentition.
- ▶ Telescopic crown prostheses
- ▶ Dentures on telescopic crowns ε type clasp prostheses. The stench of being smoothed on the teeth behind the help of the crown, which is stored in two parts. The first part ε with a metal-ceramic crown and familiarity. For the same principle, one can use the knowledge. The stench is needed in quiet vapors, if a great prosthesis is needed, which cannot be fixed.

## Know sectors and segments of dentition

Practitioners of dentists do not have a single incidence of unilateral loss of jaw teeth on one or both slits. In such furnishings, it is possible to prepare a clasp prosthesis with piece teeth, which are molded only on one side.

In some situations, it is accepted to use one-sided prostheses - known sectors or segments, which can also be fastened with clasps or attachments. If the distant tooth is out of the way, so that there is a bone defect, then the familiar segment rips to the supporting teeth only behind the additional locks.

## Mind-knowing prostheses

Mentally and knowingly, prostheses are designed for the duration of one tooth. Most often it is important to get rid of the chewing teeth. A piece tooth in a prosthesis can be made from plastic or ceramic. To flatten it on the articulated teeth of the supporting metal paws, precisely gouge and repeat the contours of the supporting teeth. The supporting elements can simply be glued to the tooth, or they can be lowered into the front of the preparation groove with the additional fixation of light-cured materials



## Familiar nylon prostheses

Familiar prostheses made of nylon are a new word in the famous prosthetics. Smells are made from nasty and soft nylon materials, and by a number of parameters to turn over specific design with acrylic bases.

prostheses from nylon can be used as partial (to replace the defects of the dentition in one or two teeth, or more large), so they change. Nylon dentures are not only designed to renew the dentition, they are also made from nylon materials, the caps are for sports or for visualization. It is important to use nylon prostheses for therapeutic purposes: they are used to treat a lower slotted slope for sickness, as well as to treat bruxism.

Nylon dental prostheses are ideal for patients who suffer from stage I and II periodontal disease, allergies and diseases, and prevent teeth preparation. Such prostheses, hand-made, do not fail in principle, because it is possible for children and people to wear them, as, due to their professional skills, they often take the risk of traumatism.



# Nylon dentures



- ▶ Clasp dentures
- ▶ Modern dentistry proposes to us a wide range of approaches to dental prosthetics. The creation of new technologies, prostheses and implants are absolutely unrecognizable and unremarkable not only for the patients, but often for the patients themselves.
- ▶ Clasp denture



Such a design is used traditionally - you have to follow the help of special -clasps, professionally hunt an abutment tooth. The knobs are rocked specially for a skin tooth, and it's good to be flattened on a new one, but at the same hour, you don't catch your springiness. For the installation of clasp prostheses on the clasps, it is necessary to have deciduous supporting teeth in the mouth. The main shortcoming of the constructions on the clasps is the blurring of the fixing elements (slacks) when they are raised or weaker.



## ► Clasp prostheses

- The current dentistry will offer you a wide range of approaches to dental prosthetics. The creation of new technologies, prostheses and implants are absolutely unrecognizable and unremarkable not only for the patients, but often for the patients themselves. One of the novelties, others have already won the deserved popularity of the methods of prosthetics - prosthetics on Bugeli. Byugelne prosthetics of teeth I will take my name from the Nimetsky word "Bugel" (byugel) - an arc.

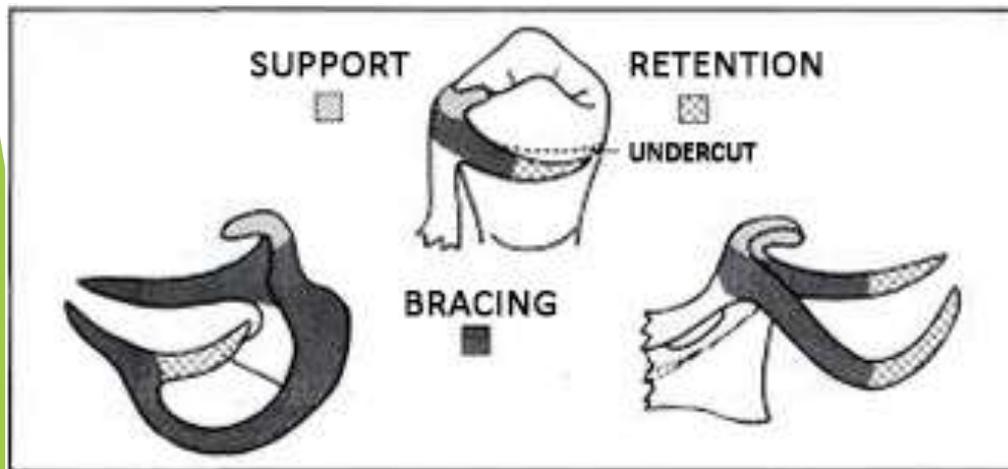


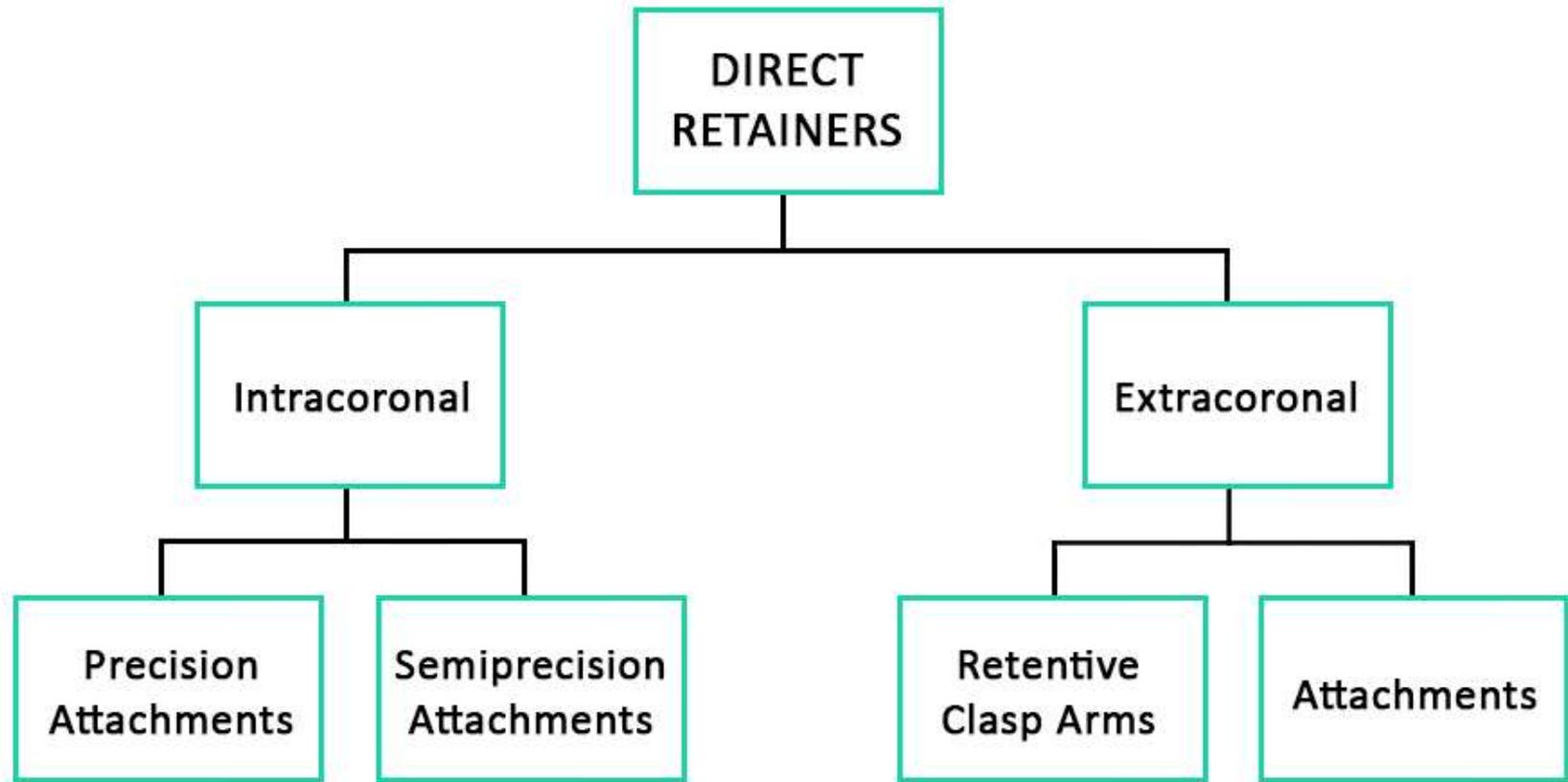
The design of the clasp is foldable and is a metal arc frame made of a light, sintered alloy, which is even more high-quality, but rather light and small in size. The arc is seated with piece teeth, the whole structure is mounted on the point of the outer tooth and is based on the principle of the bridge. The preparation of clasp prostheses includes the preparation of a metal frame, which can be stored from the arch and fixed elements, and the preparation of a side-like part - piece ash with piece teeth.



# Clasp prosthesis with locks

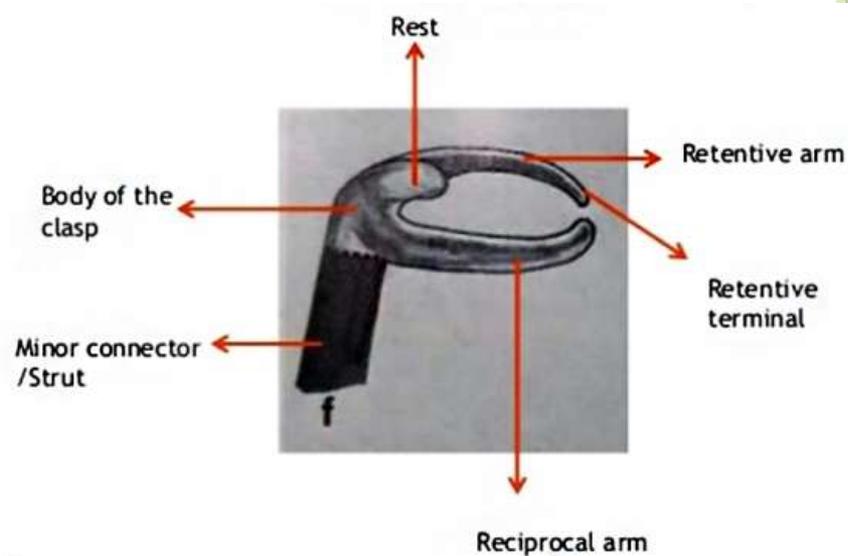
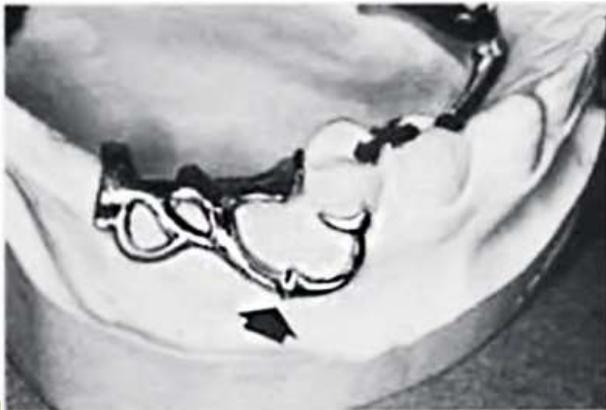
The fixation of the locking clasp prosthesis is even stronger, and a large part of the jaw vice is transferred to the supporting teeth, to the special crowns in front of the front. Such a design is created by the team, so that it allows you to shake off the hooks and get the physical elements of the middle crowns and create a design that is uncomfortable for those who feel comfortable.





▶ The Danish view is one of a kind in its high quality and goodness to the satisfaction of the most natural. When installing ceramic clasp prostheses on the basis of zirconium oxide, a beautiful callous view of your new teeth is guaranteed, and if you attach them to the middle of them, the support is guaranteed - to look at the widest you can think of it, you don't have a good luck!

▶ Making a clasp prosthesis on the locks is even more accurate in design and modeling of all the elements, that is, the number of such constructions is available, less clasps on the clasps. This is the reason for the appearance of prostheses without having a wide range.



# Clasp prosthesis

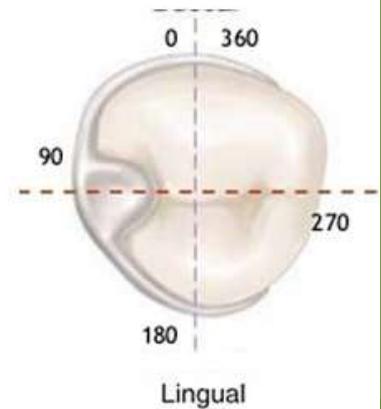
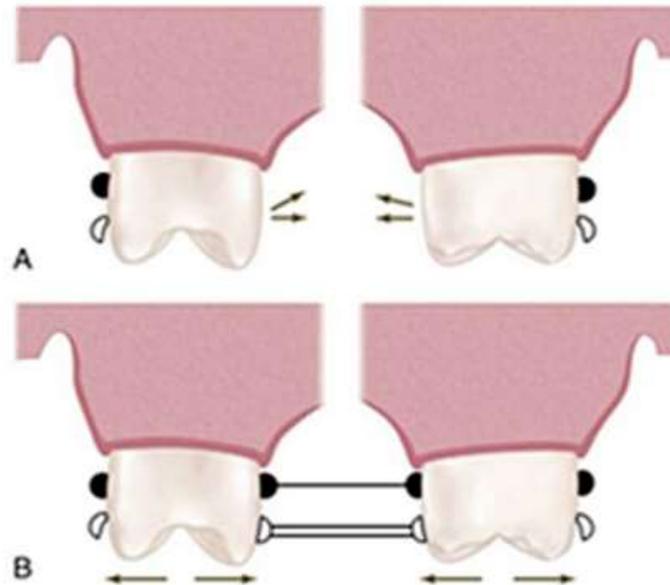
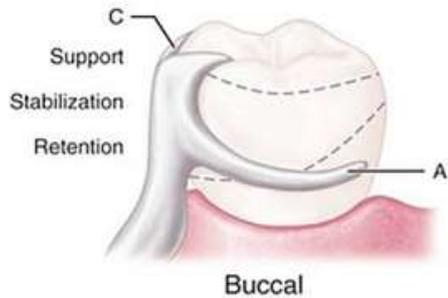
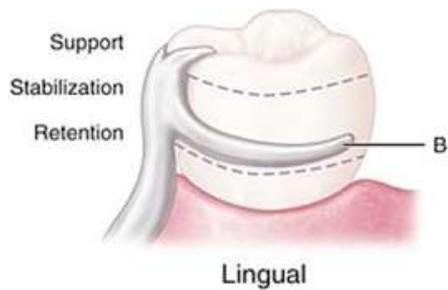


# Clasp prosthesis with locks, attachments



**Direct retainer** is any unit of removable partial denture that engages an abutment tooth in such a manner as to resist displacement of the prosthesis away from basal seat tissues by

1. Functional means: by engaging a tooth undercut present cervically to the height of the contour.
2. Mechanical means: to support, provide retention and bracing the tooth



***Thank you for the attention***

