* THE PROCESS OF COPING WITH PROSTHESES FOR DEFECT PATIENTS

المدرس رولا وليد عبد الرزاق
فرع التعويضات الاصطناعية

*Introduction

* The choice of the rehabilitation of maxillofacial defects by surgical or prosthetic methods depends on:


1
1
1

* • Young patients usually desire their facial region to be treated with their own tissues rather than prostheses.

* • Older patients usually desire to be treated by using prostheses.

* Generally:

* • Small maxillofacial defects are treated by surgical methods.

* • Larger defects are treated by prosthetic restorations in order to give a more natural appearance.

* This process requires more complicated procedures.

* Patients with those kinds of defects are generally older patients and may not be able to tolerate those kinds of treatments.

* Also, the radiation used for the treatment of tumors, which are the causes of these defects, may lead:

01

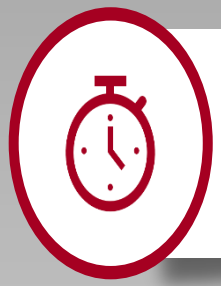
1

•Vascularity to decrease.

02

2

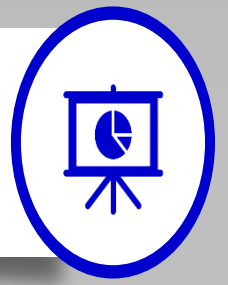
•Fibrosis to increase.



03

3

•Complications to occur.



04

4

•The surgery area to not heal after surgical operation.

* Additionally, if any defect area appeared after the removal of a tumor, the prosthetic treatment of the defect area allows the region to be closely and frequently monitored in terms of the risk of recurrence.

Factors such as:

01

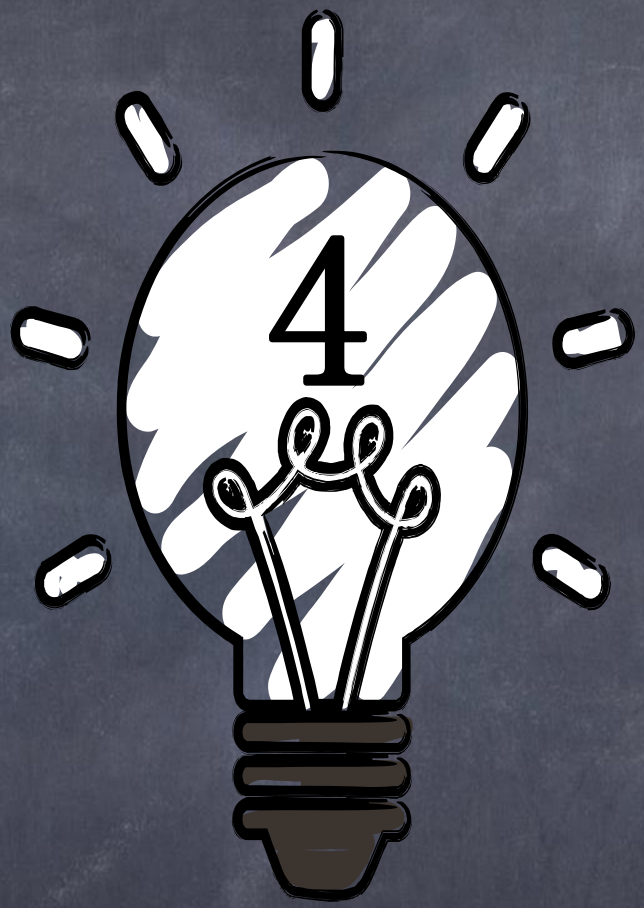
- The age of the patient.

- The defect area’ s largeness which does not allow the area to be able to close by surgical methods.

02

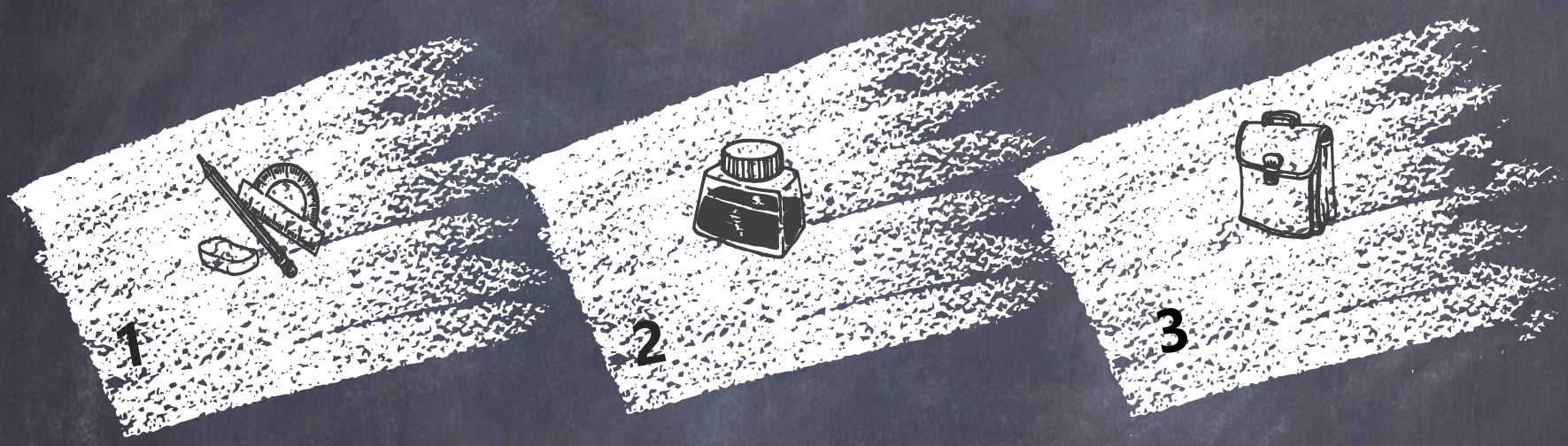
03

- The need to be frequently monitored determines the prosthesis planning.



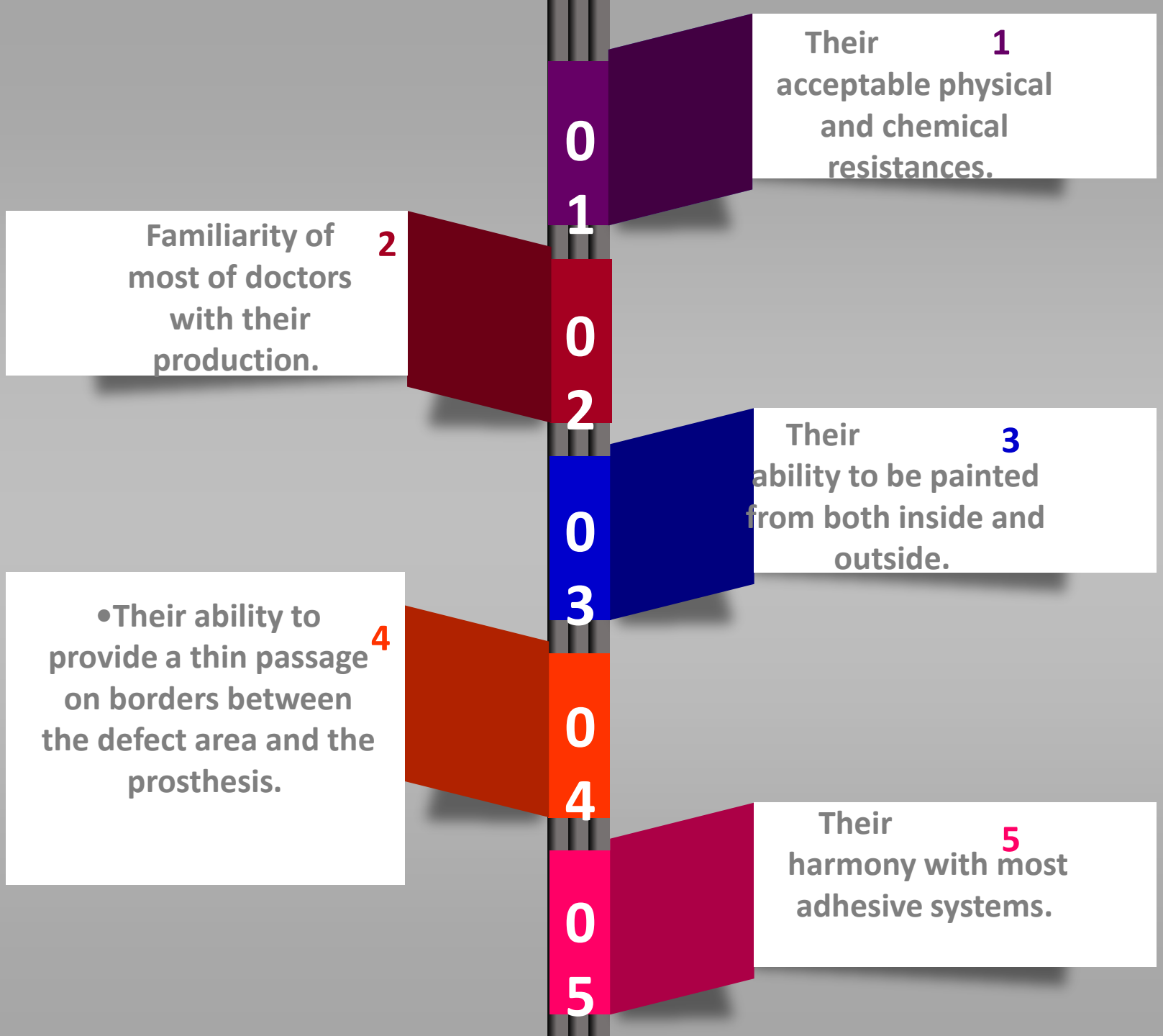
- The patient’s risk of recurrence.

Materials used for the production of current maxillofacial prosthesis:



- Acrylic resins.
- Polyurethane elastomers.
- Silicone elastomers.

* Some of the advantages of acrylic resins are:


01
Their acceptable physical and chemical resistances.
1
02
Familiarity of most of doctors with their production.
2
03
Their ability to be painted from both inside and outside.
3
04
•Their ability to provide a thin passage on borders between the defect area and the prosthesis.
4
05
Their harmony with most adhesive systems.
5

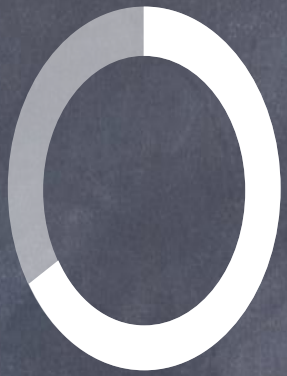
They have also some disadvantages, including:

1

•The fact that they have no elasticity (elasticity is demanded for most patients).

2

•Their lack of compliance with mobile tissues.



3

•Discomfort caused by irritation of tissues.

4

•High thermal conductance.

* Besides the advantages of polyurethane elastomers, such as:

* • Their ability to be thinned at their edges without any laceration or enlargement or any harm.

They have also some disadvantages, such as:

1

- High moisture sensitivity of the isocyanate included in them.

2

- Not having color stability.

3

- Not being compatible with adhesive systems.

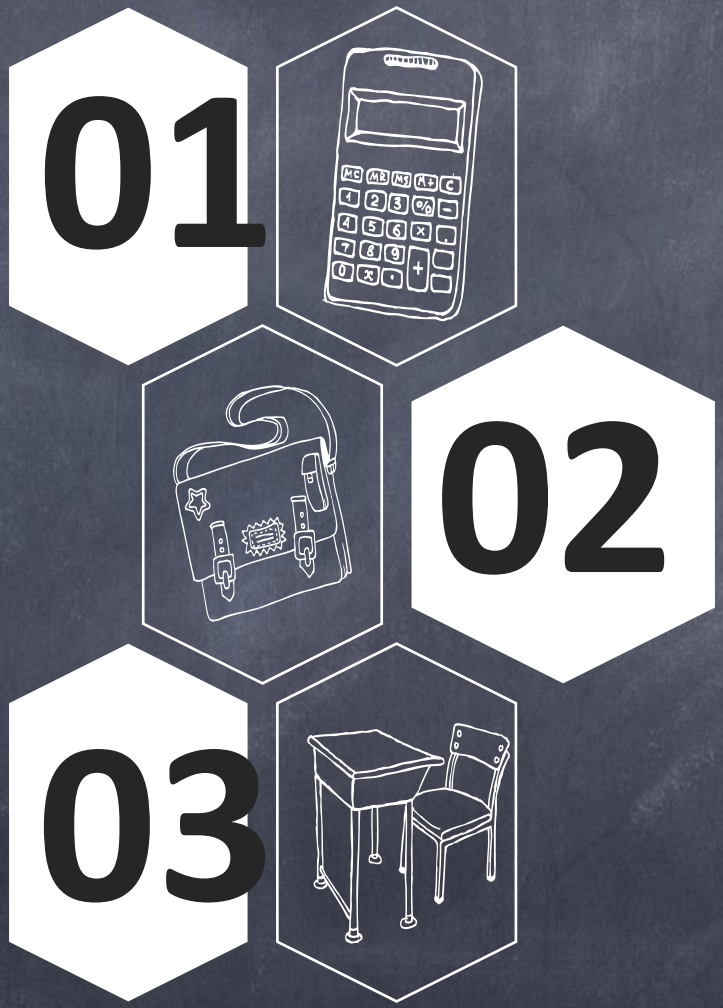
4

- The toxicity of isocyanate.

Silicone elastomers are the most used materials for maxillofacial prostheses. Most of those materials have:

1

•Little resistance against laceration.



2

•Their painting procedures are very difficult.

3

•The resistance against laceration is higher in RTVs (silicone vulcanizing at room temperature) and HTVs (silicone vulcanizing by heating).

But because of their:

1

•Easy usage.

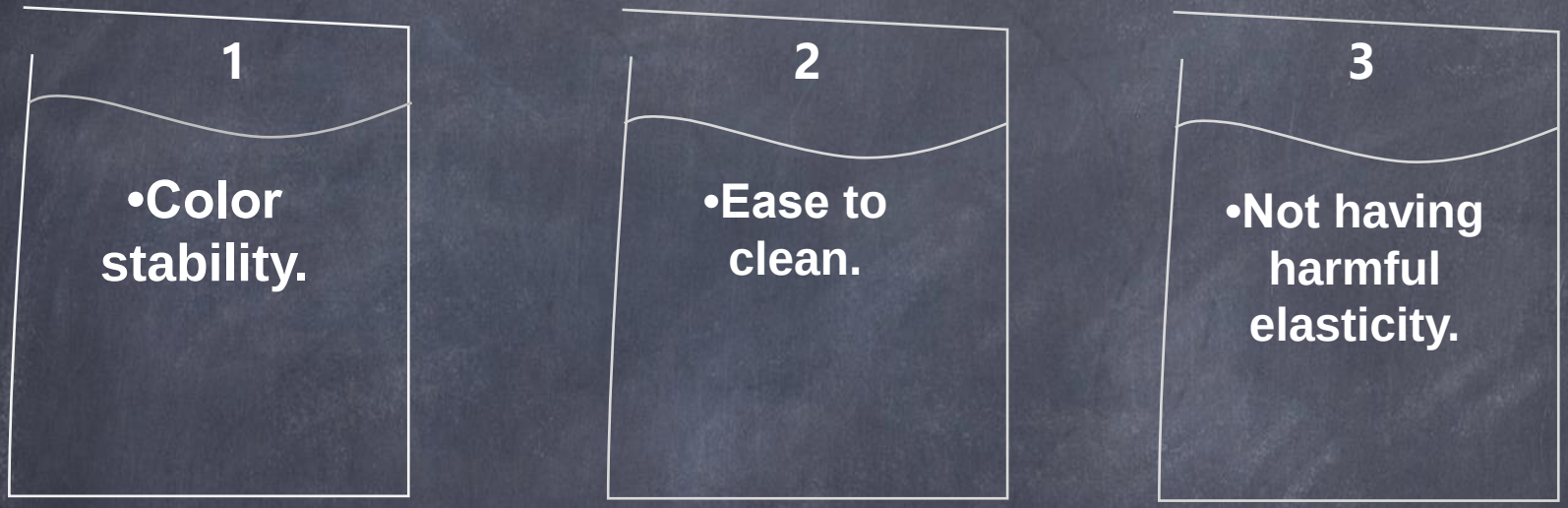
2

•Natural results when they are colored.

3

•Successful shaping.

But because of their:



- Being compatible with mobile tissue regions, RTVs are generally preferred for the restoration of defect regions.

One of the most significant problems associated with maxillofacial prostheses is:

1

- The lack of retention.

2

- The lack of stability.

Retention is provided through:

1

- Adhesive systems.

2

- Mechanic methods.

3

- Tissues in anatomical areas.

4

- Implants.

Are used as adhesive systems:

Step1

- Adhesive bands.

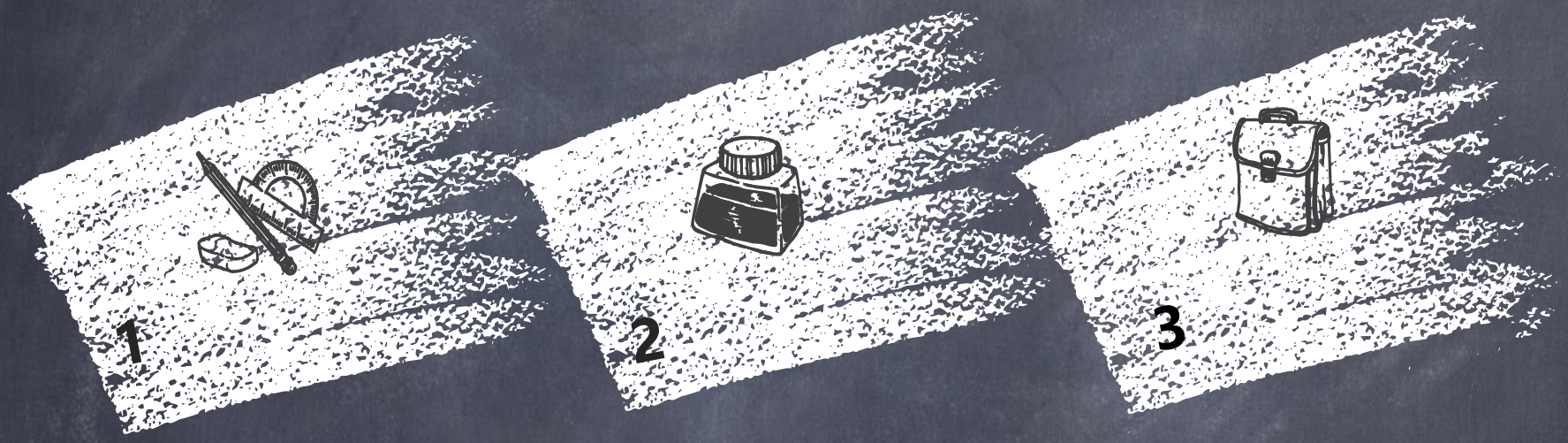
Step2

- Aromatic cements.

step3

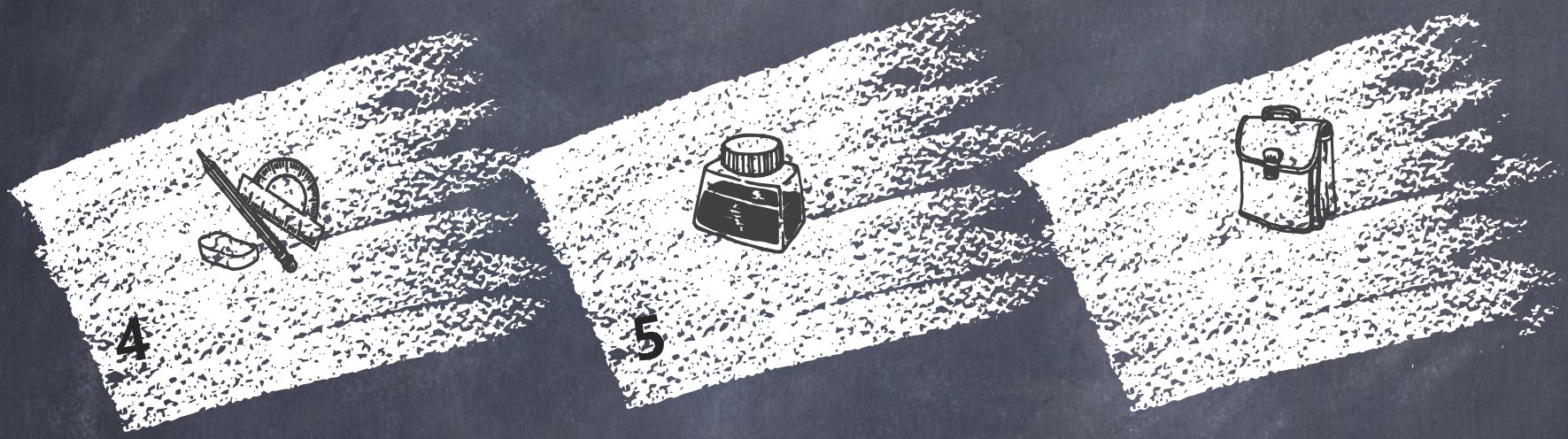
- Silicone-based adhesives.

Because of:



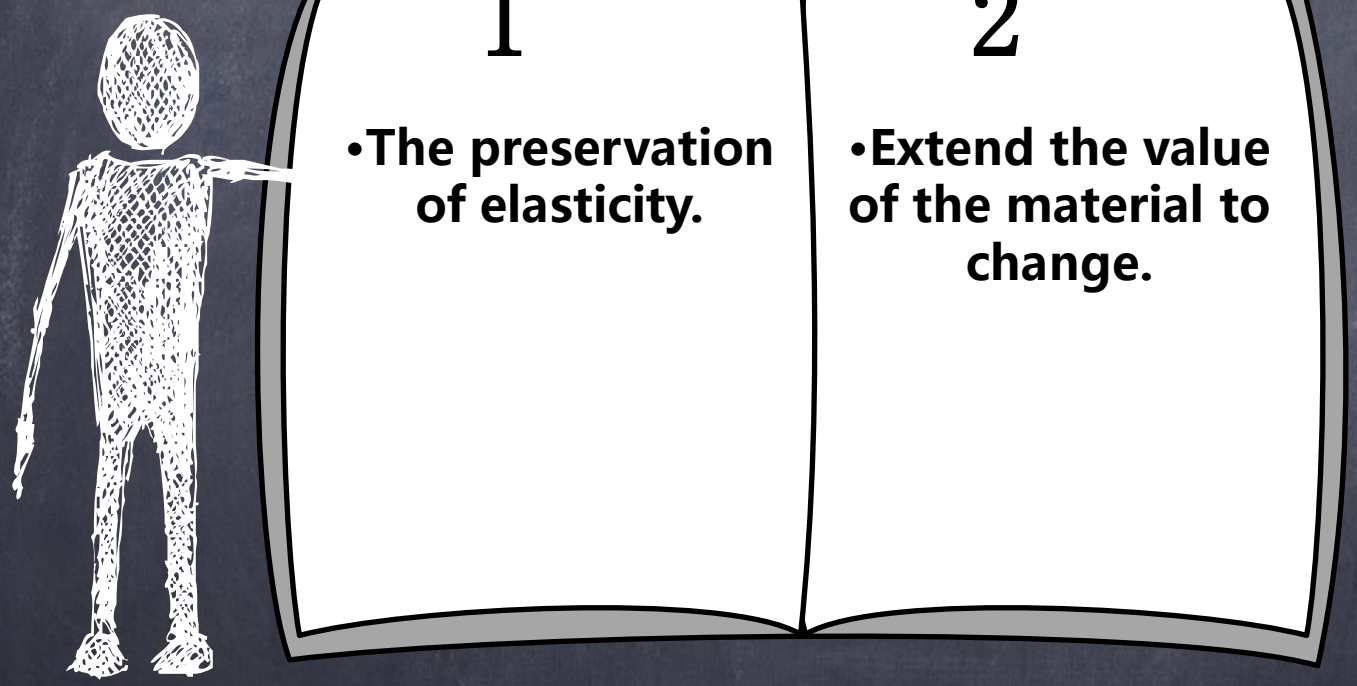
- Daily relocation of adhesive bands.
- Undesired edge loss of prosthesis may occur.
- There may be problems in the adhesion of the band to silicon.

Because of:

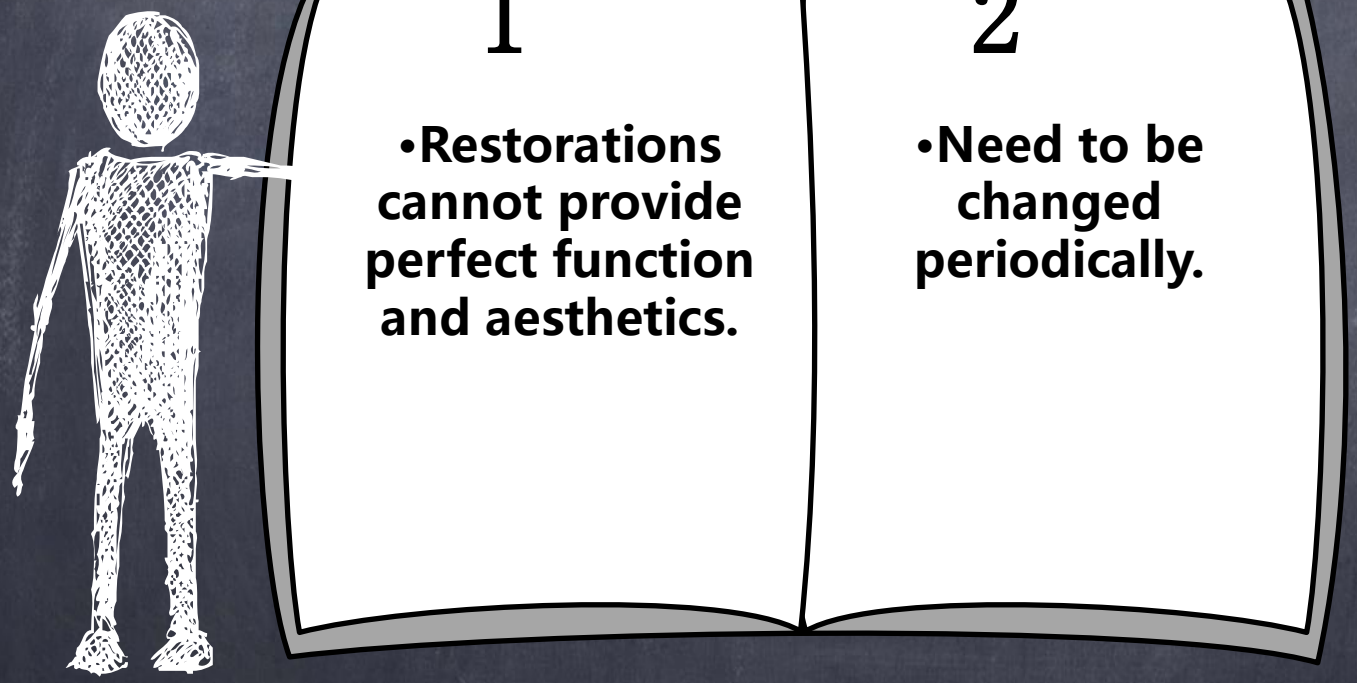


- Daily extraction of adhesive cements may be harmful for the surface color of prostheses and may lead to edge loss.
- Silicone solvent is required for cleaning silicone adhesives.

Those solvents may lead to:

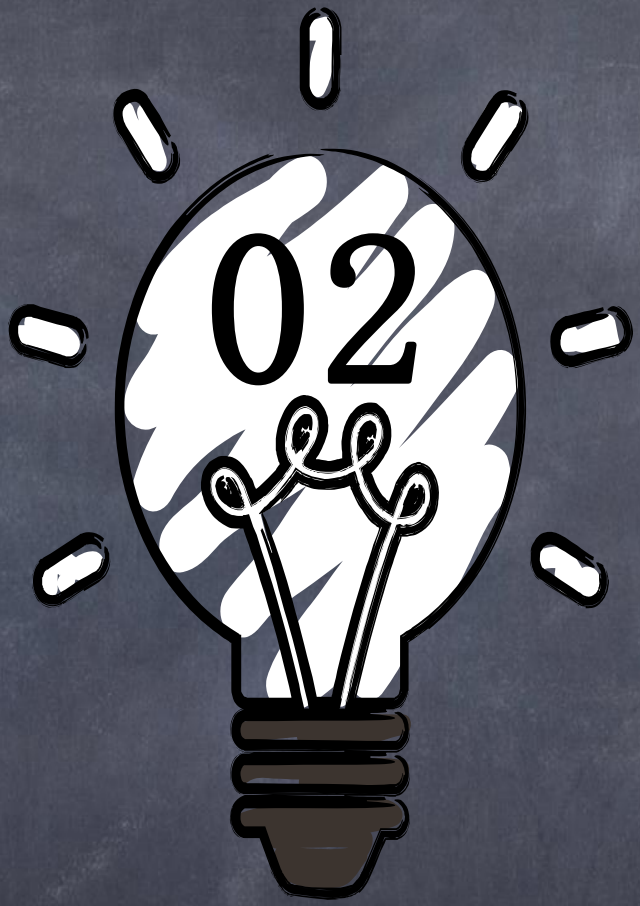


Because of such kinds of limitations:



* On the other hand, tissue barriers also cannot provide perfect retention.

* So, osseointegrated implants offer much better retention.



QUALITY OF LIFE OF DEFECT PATIENTS

In recent years, there has been growing interest in using patient-reported outcomes in order to:

Step1

- Facilitate patient-centered care.

Step2

- Screen for physical and psychological problems.

step3

- Monitor a patient's progress over time.

Facial disfigurement as a result of:

Step1

- A congenital anomaly.

Step2

- Trauma.

step3

- Tumor surgery.

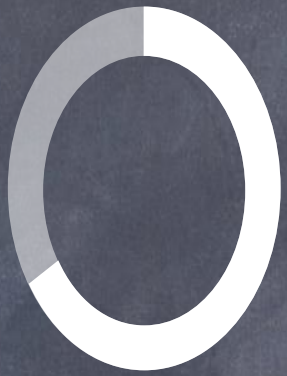
Can have devastating effects on the:

1

- Aesthetic.

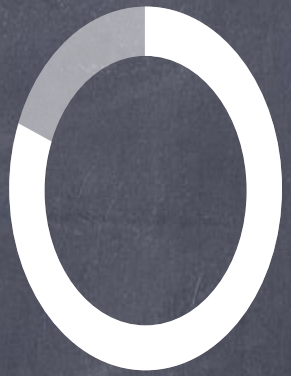
2

- Functional.



3

- Economic.



4

- Psychosocial aspects of a person"s life.

Patients with maxillofacial defects may express:

1

- Unhappiness with their body image.

2

- Low self-esteem.

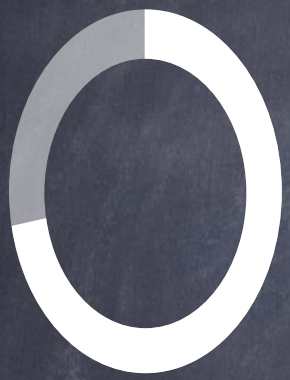
3

- Post-traumatic stress disorder symptoms.

4

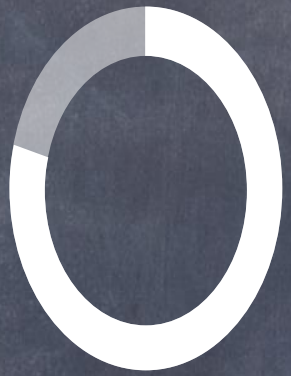
- Social isolation caused by stigma.

Stigma is accepted as an important social determinant of health because it may contribute to:



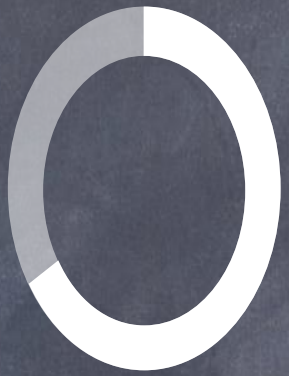
1

- Suffering.



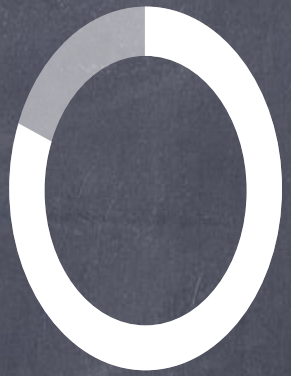
2

- Delay in appropriate help-seeking,



3

- Treatment dropout.



4

- Treatment effectiveness.

* Thus, stigma has become a matter of particular interest for public health.

* In this context, maxillofacial rehabilitation through prosthetic restoration is a cornerstone of efforts to restore the function and form of patients with missing or disfigured facial structures.

Maxillofacial prosthetics, as an alternative to surgery, offer:

1

- Non-operative rehabilitation.

2

- Provide satisfactory aesthetics.

3

- Quality of life (QOL).

4

- Facilitate reinstatement of patients in their family situations and social environments.

Previous studies have shown that patients with acquired facial disfigurement have:

Step1

•Greater psychosocial problems.

Step2

•Difficulty adjusting to their facial disfigurement.

step3

•More physical impairment of QOL than patients with congenital facial disfigurement.

* Because of this, in a clinical setting, the identification of the need for prosthetic rehabilitation in these patients, a process which can restore QOL, is most important.

* Recent studies have emphasized the importance of developing additional programs to improve the quality of care and to enhance the well-being and satisfaction of patients.

* The evaluation of patients" QOL related to prosthetic rehabilitation may provide valuable information to assist the maxillofacial prosthodontic team in treatment planning, monitoring, and outcome assessment.

* Although there is much research regarding the effects of prosthetic rehabilitation on health- related QOL in patients with maxillary defects, there are few studies investigating the health-related QOL of adult patients with facial prostheses.

* Recent data shows that implant-retained maxillofacial prostheses provided a significant enhancement in patients" QOL and that they were tolerated more easily than adhesively-retained prostheses.

* Patients with acquired orbital and nasal defects had lower health-related QOL than healthy individuals, as well as patients with acquired auricular defects.

* Health-related QOL is a multi-dimensional global construct, defined as an individual's perception of his or her position in life, in the context of the culture and value systems in which the person lives and in relation to that individual"s goals, expectations, standards, and concerns.

* Patients' perceptions of treatment with maxillofacial prostheses are key elements in evaluating quality of care, because measuring patient outcomes, such as health-related QOL, in clinical practice may provide important information for planning and evaluation of extensive maxillofacial prosthetic rehabilitation.

It is known that the loss of part of the face and its prosthetic restoration requires social and psychological adjustment because a visible disfigurement leads to:

Step1

- Lowered self-esteem.

Step2

- Negative self-image.

step3

- Social isolation for life.

* Klein et al. showed that the patient's own body image is significantly altered without a restriction in the acceptance of their body by others.

Newton et al. reported that these patients experienced many psychological and social problems, such as:

1

- Negative feelings.

2

- Avoiding showing their partner their face, without the prosthesis.

The adjustment process to disfiguring conditions and maxillofacial prostheses are influenced by:

1

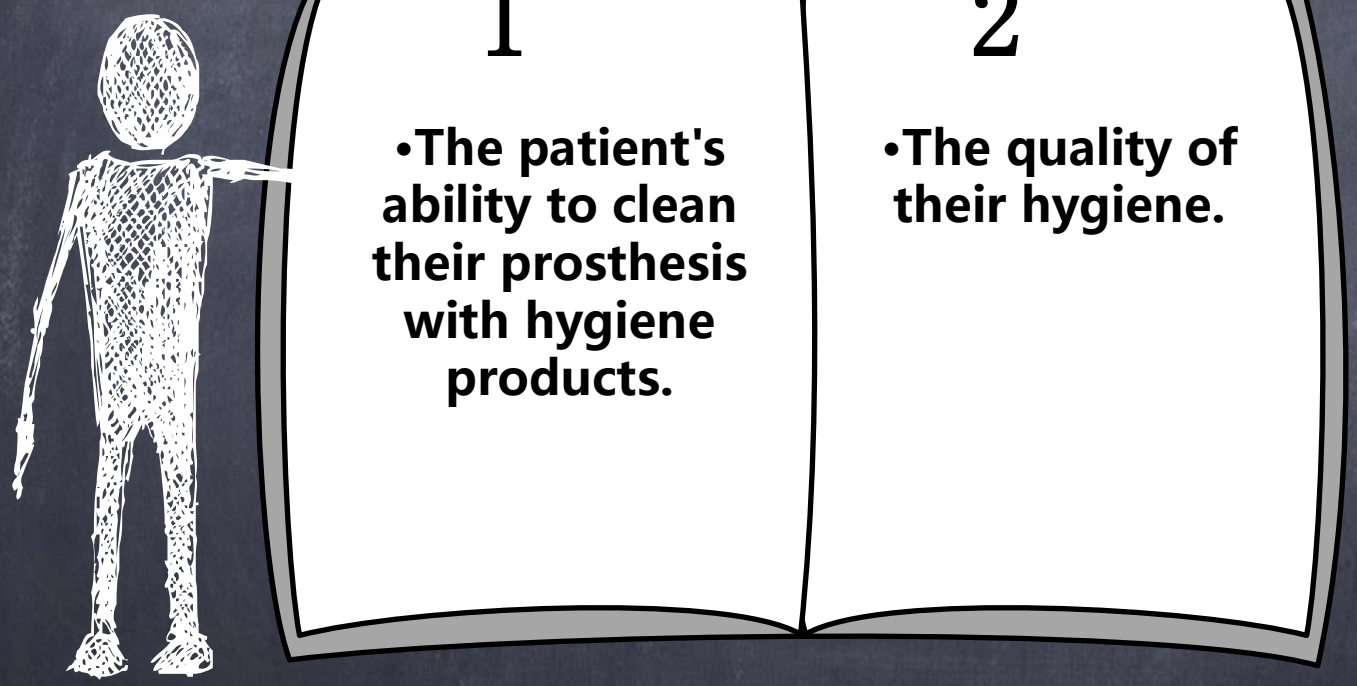
- The interaction between various underlying cognitive self schemas.

2

- The social and cultural context.

* This may be explained by the fact that people with impaired vision had serious restrictions in physical activities (reading, outdoor mobility, participation in leisure activities, and shopping) that were negatively related to the experience of health and vitality.

In addition, monocular vision and the associated compromise in depth perception may reduce:



1

- The patient's ability to clean their prosthesis with hygiene products.

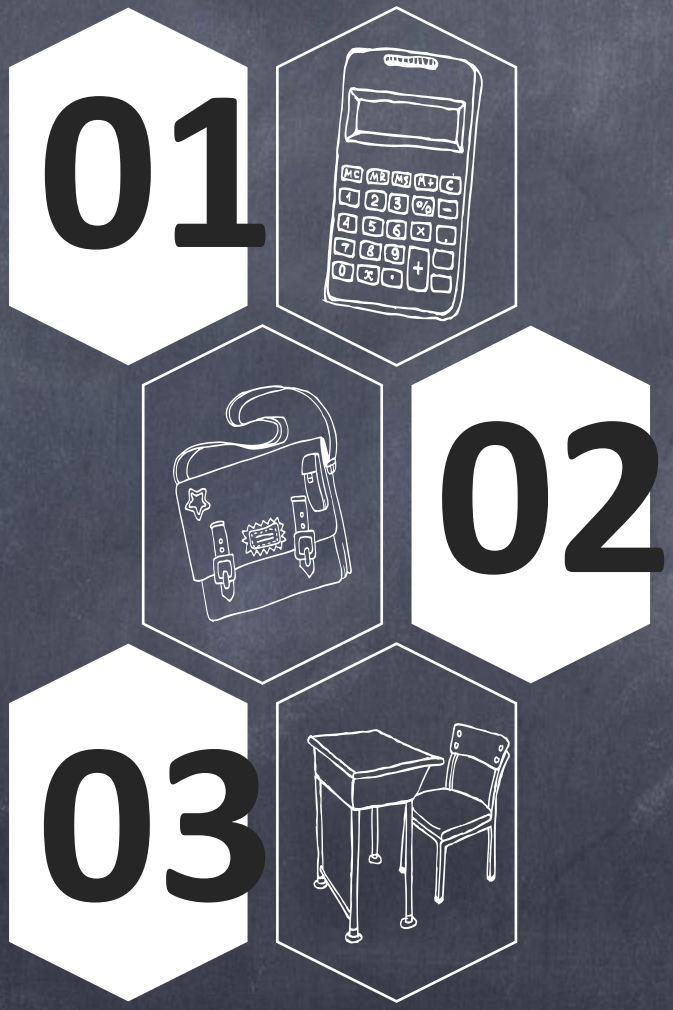
2

- The quality of their hygiene.

Patients with prosthetic noses reported more problems with the prostheses, such as:

1

•Going out in hot and cold weather.



2

•Playing sports.

3

•Allergies that affects their psychological and social well-being.

* Other possible explanations for this can be drawn from our experiences that these patients experience difficulties in camouflaging the scars and prosthesis margins more than other patients.

THANK YOU