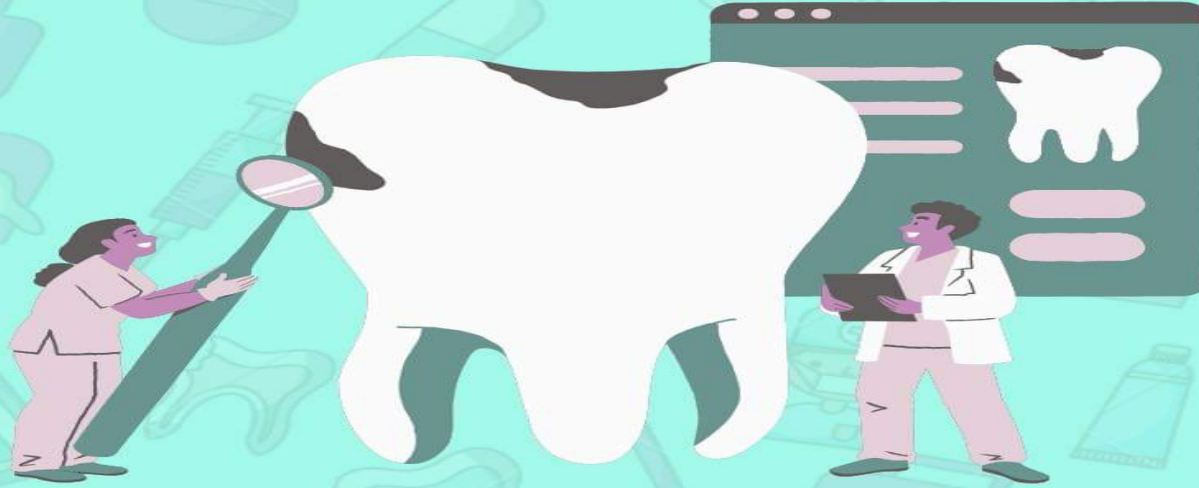


INTRODUCTION TO DENTISTRY



LEC NO. : 5

DONE BY : Nour Al-amoush.

وَقُلْ رَبِّ زِدْنِي عِلْمًا

Introduction to Dentistry

Prosthodontics & Dental Implant

الزراعة . التحويلات السنية

Dr. Abdelrahman Eldeghedy
Assistant Professor of Oral Biology

Objectives

At the end of this lecture, the students will be able to:

1. Recognize the history of prosthetics
2. Identify the definition of prosthodontics
3. Recognize the concept of dental implant
4. Define the branches of prosthodontics
5. List the objectives of prosthodontics

Agenda

01

History of
artificial teeth

02

Definitions

03

Causes of teeth
loss

04

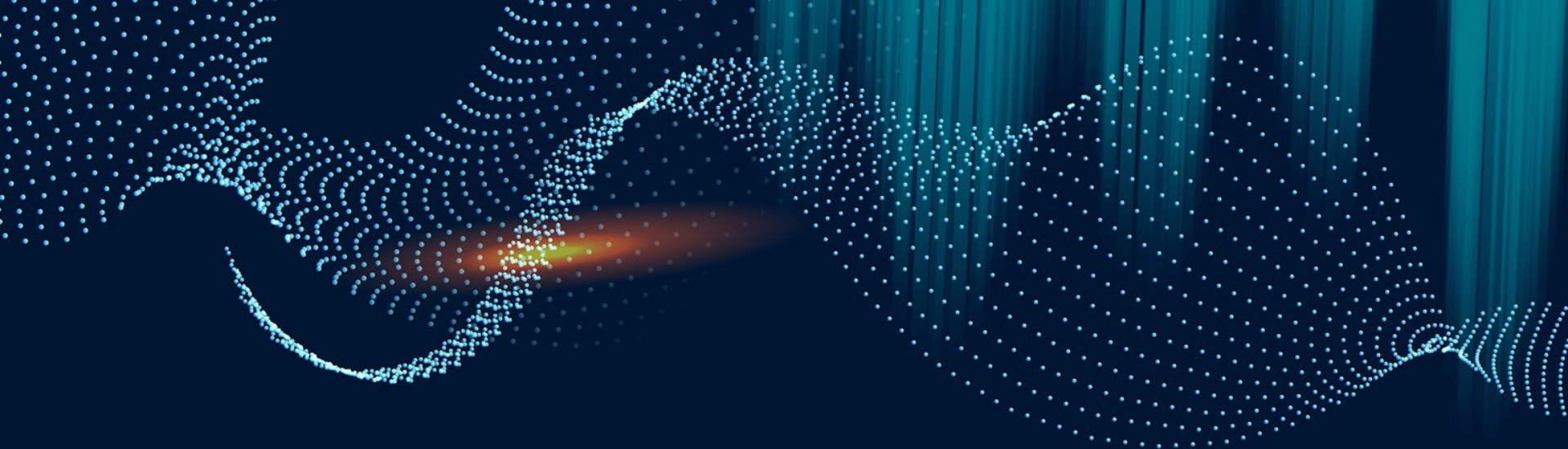
Consequences
of teeth loss

05

Branches of
prosthodontics

06

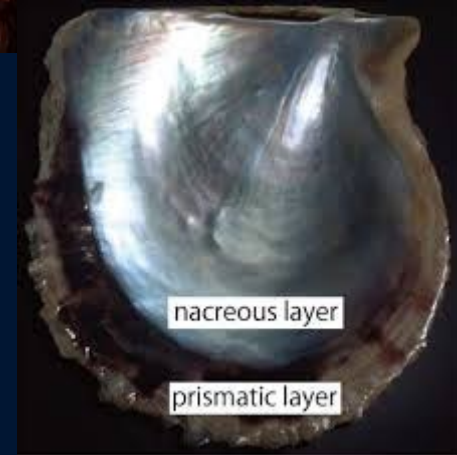
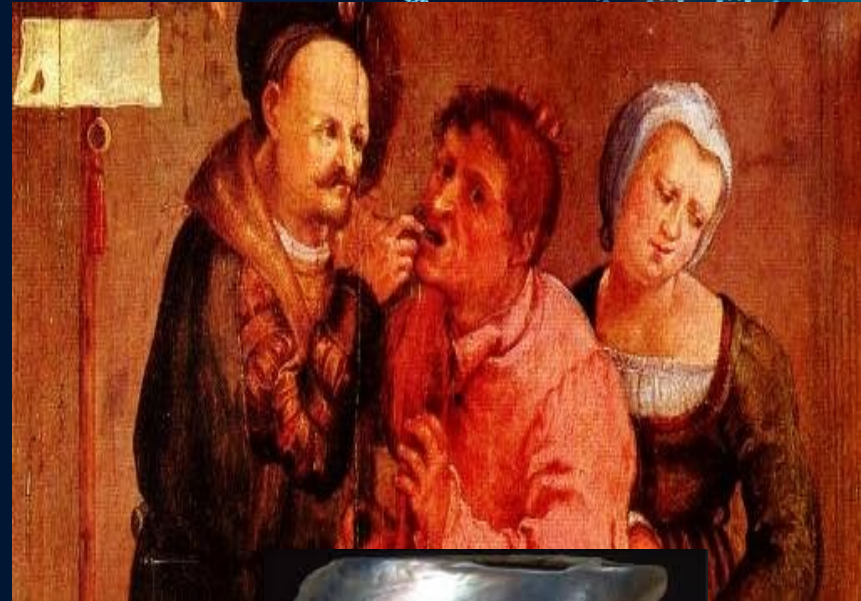
Treatment
goals of
prosthodontics



01 | **History of artificial teeth**

History of artificial teeth

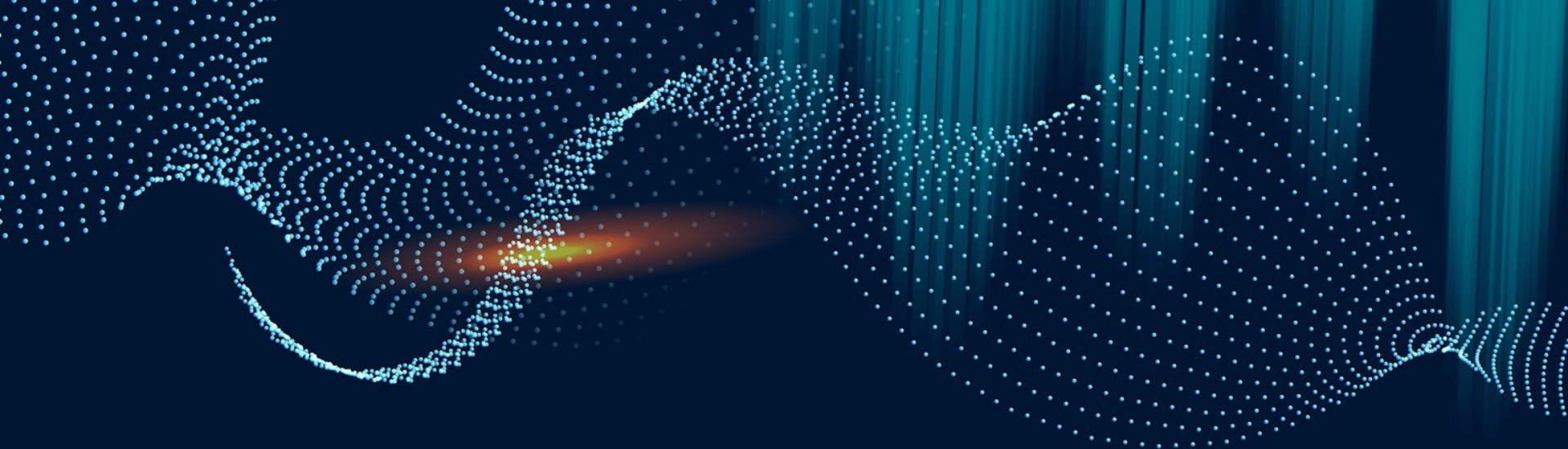
- Replacements of lost teeth have been produced for thousands of years
- 1st dentures were 700 BC from ^{العاج} ivory & bone silver, gold, mother of pearl → ^{المواد} ^{بالي كالتوا} ^{لستعملوها}
- In 1774, dentures made from ^{أطعم الأسنان} porcelain



History of artificial teeth

- The real breakthrough came when vulcanized rubber was discovered
- The discovery of acrylic resin is the next major revolution in prosthodontics





02 | Definitions

Dentulous الأُسنان لها سليمة وموجودة

An individual who has
his/her natural teeth
present.



Edentulous فقدت أسنانها

The individual who has
lost his/her natural teeth
May be partial or
complete



Prosthetics

بجمل تدریضه لأی جزء
فی اکبسم .

Replacements for missing
parts of the human body

Prosthodontics

الاستقامه
السنيّة، لسن أو أكثر .

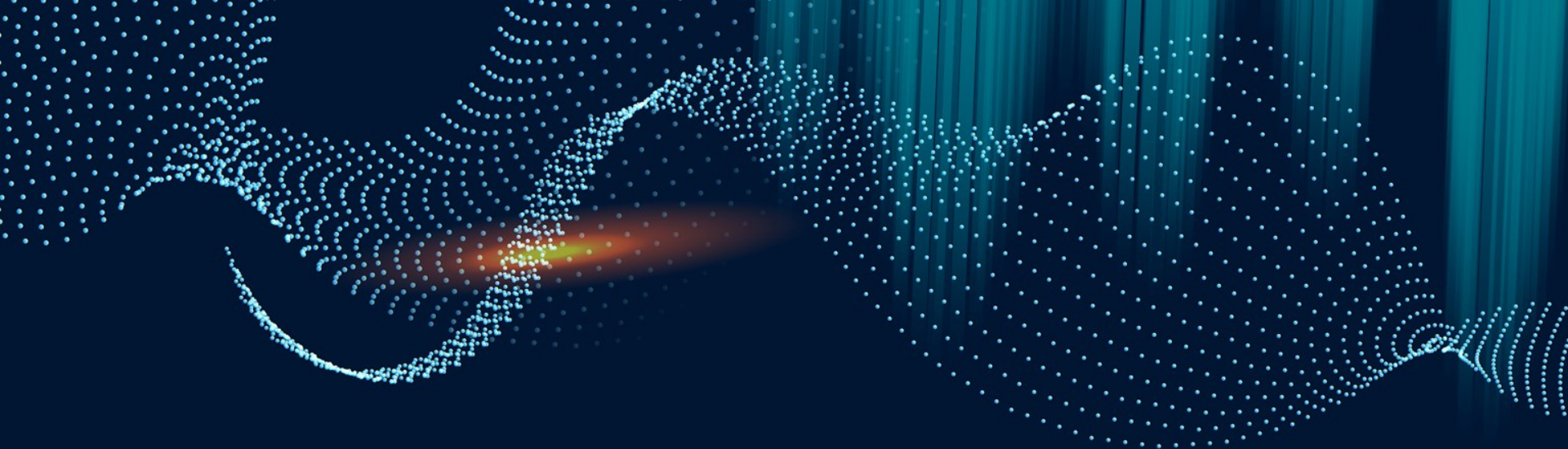
Branch of dentistry pertaining to
the restoration and maintenance
of oral function, comfort,
appearance, and health of the
patient



أي جزء صناعي أُنشأ
بجودته في الجسم → **Prosthesis**

An artificial replacement of
absent part of human body





03

**Causes of teeth
loss**

Causes of teeth loss

أسباب فقر الأسنان :

- Traumatic injuries
- Caries → تسوّس الأسنان
- Periodontal diseases → أمراض اللثة
- Cysts, malignancies and tumors → الخراج
الأورام الخبيثة



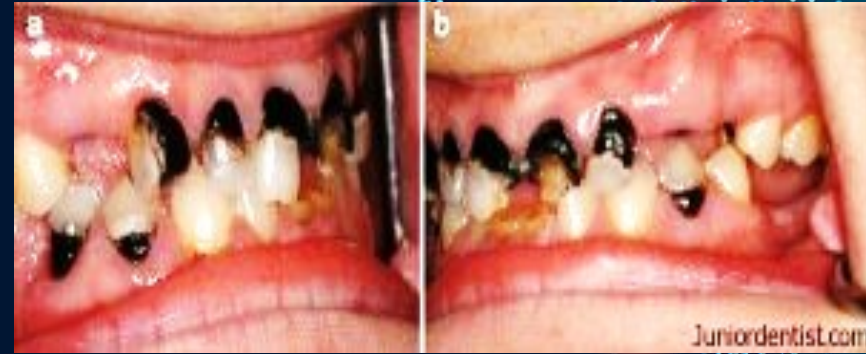
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نقص الكالسيوم يمكن أن يؤثر على الأسنان لأنه يزيلها تدريجياً
ولكن ما يكون سبباً يفقدتها.

Causes of teeth loss

- Radiation therapy for tumors العلاج الإشعاعي لدمى مرضى السرطان
- Grossly mal-aligned teeth
- Iatrogenic extraction
- Congenitally missing teeth → إنه يتولد ربي أسنان أصلًا موجودة.
- Failure to erupt (impacted teeth) لهونا تلوّنح بس ما طلعت جوا.





04

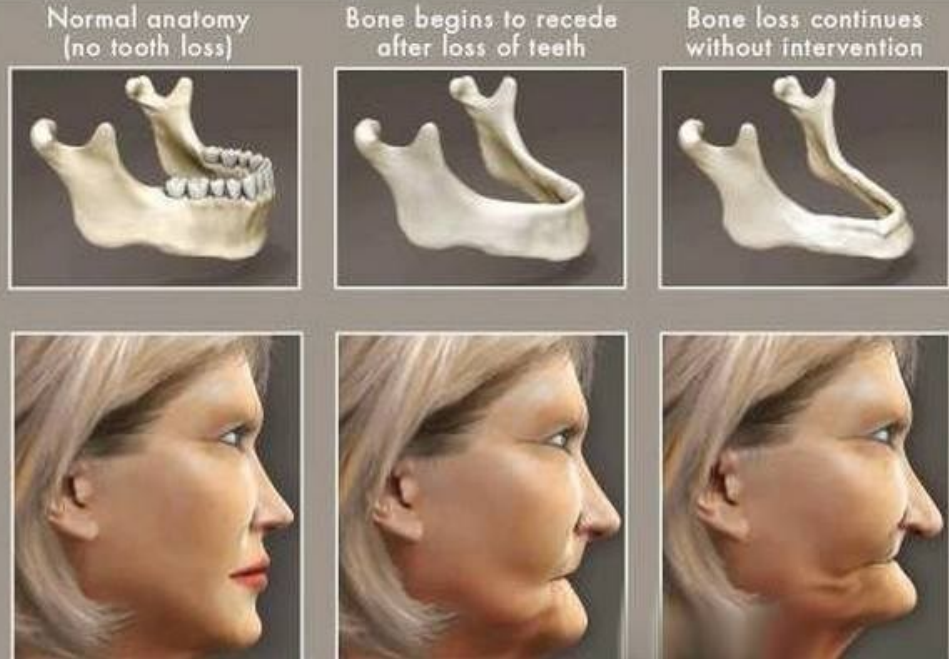
Consequences of teeth loss

يَحِيْلُ لِرِإْسَانِ فُقْرٍ
سِنْ أَوْ أَلْسِنِ رَمَاعٍ وَكُفْرِهِا
عَيْنِ الْمَشَلَّةِ فِي

Consequences of teeth loss

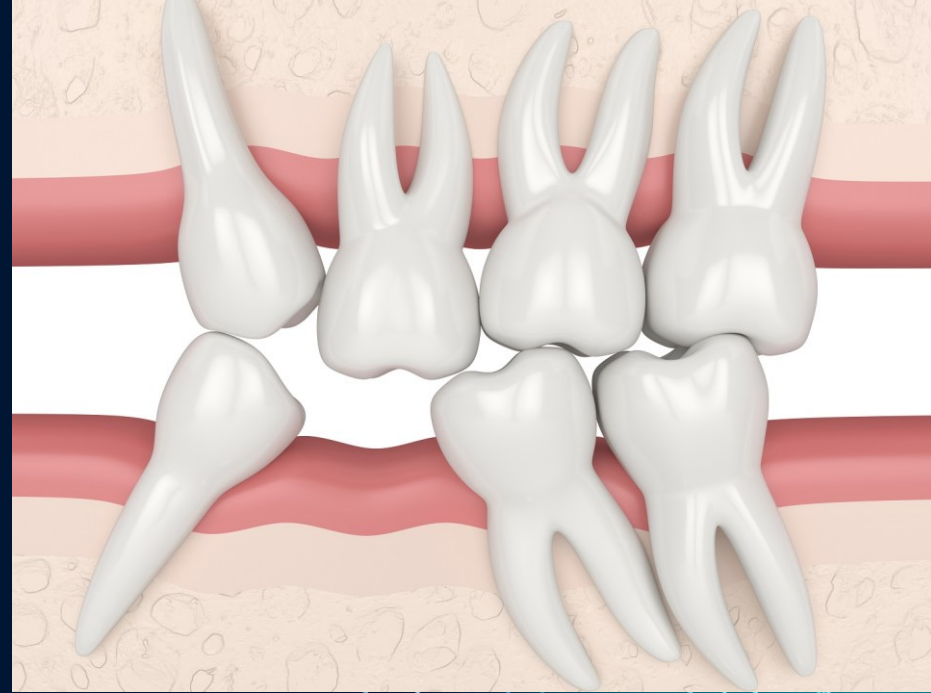
- Loss of function : the patient can't eat لأنه ما بيجل مضغ
- Loss of normal esthetic -خسر الجمالية
- Resorption: The socket gradually remodels until it assumes the shape of the rounded edentulous ridge. تآكل عظام الفك لأنه يجبرنا على Jaw

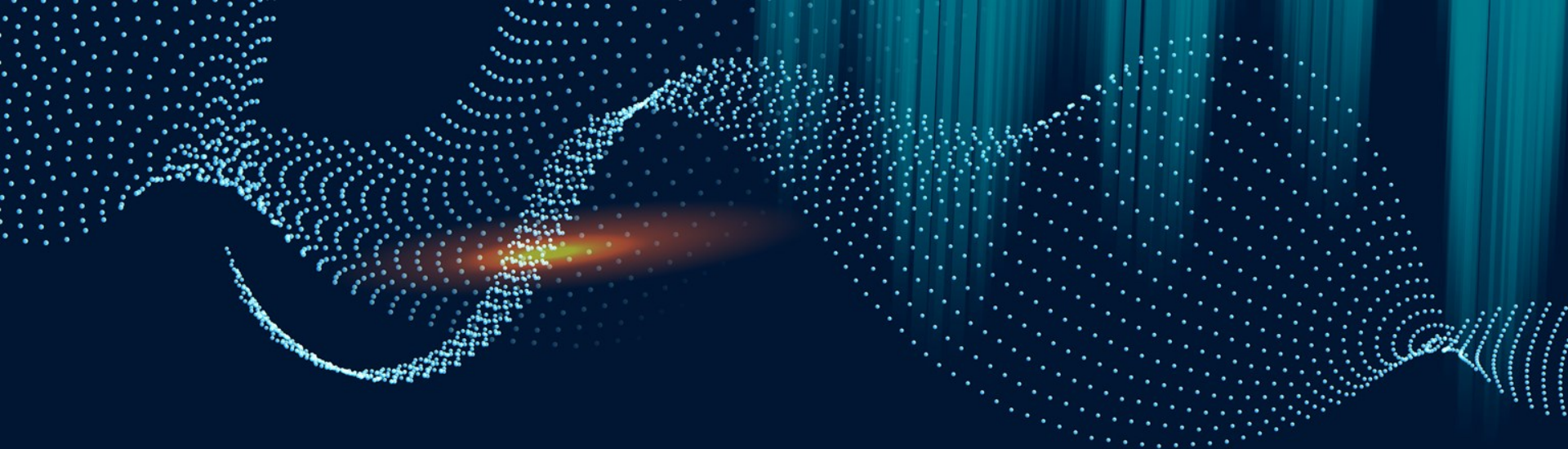
Bone Volume after Tooth Loss



Consequences of teeth loss

- **Tilting** → إِمالة للأسنان
- **Drifting** → يَدِين اسْتِي مَرْتَع / مَنخَذ مَرْتَع
- **Occlusal disharmony** → خَطَأ فِي الإِطْبَاعَة leads to discomfort, pain, or damage to temporomandibular joints. (TMD)

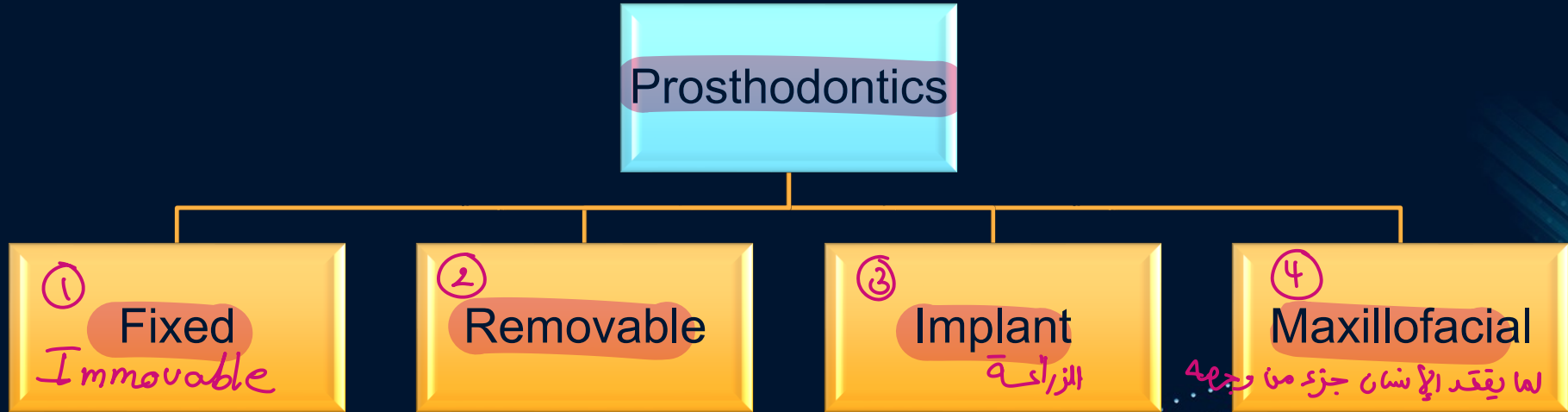




05

**Branches of
Prosthodontics**

Branches of Prosthodontics



Prosthodontics

Fixed

Removable

Implant

Maxillofacial

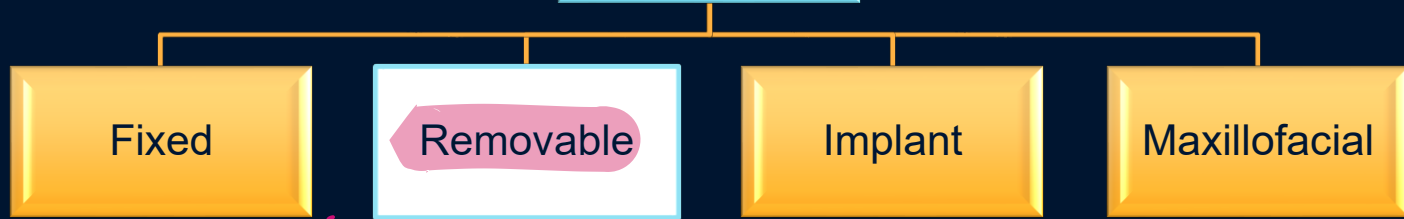
- ثابتة لا تتحرك ،

The prosthesis will be fixed to the natural tooth (Crown) or teeth (Bridge)

ممکن تکرر جسی
في حالة الفرمين
سن تم فقده .



Prosthodontics



دون مقرب / طبق أسنان

The prosthesis (Denture) can be removed and mounted from the mouth by the patient.

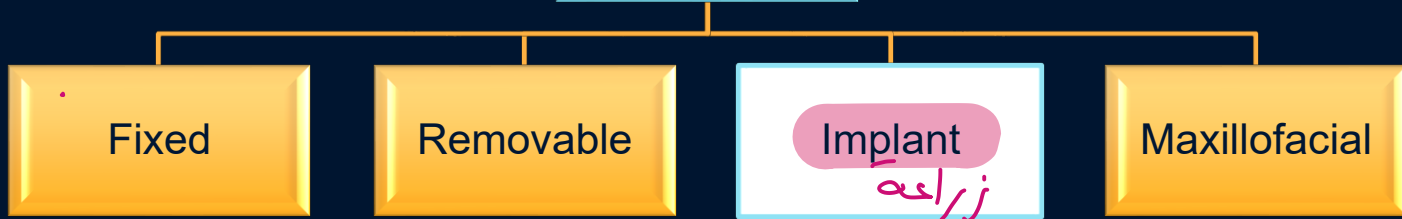
If all teeth are missing it is called (Complete denture).

If some teeth are missing it is called (Complete denture)

partial
not
complete



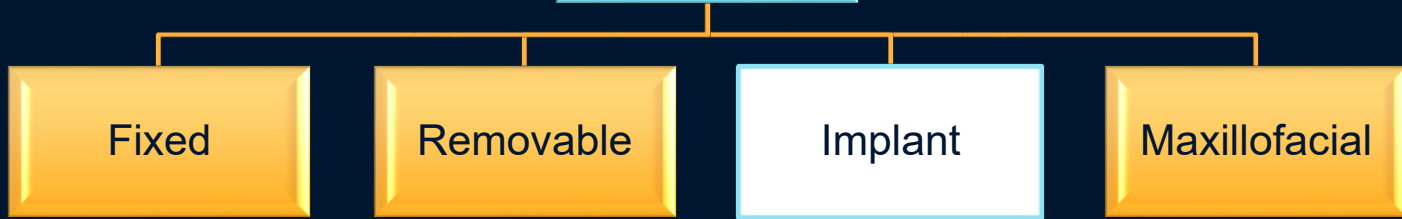
Prosthodontics



استي بيشبه المسامير
وهي ايه انشده
رأجسام مختلفه

Screw shaped pin is inserted in jawbone (like the tooth root), then a fixed prosthesis is fabricated.

Prosthodontics



Dental implants are based on osseointegration ^{→ connection with bone} concept which refer to direct connection between bone and artificial body (implant)

Prosthodontics

Fixed

Removable

Implant

Maxillofacial



لا زيم الامة تكون (Inert)
حين ماته خالصة لا تتفاعل
عنه ماته ج T_i inflammation
مثل

Prosthodontics

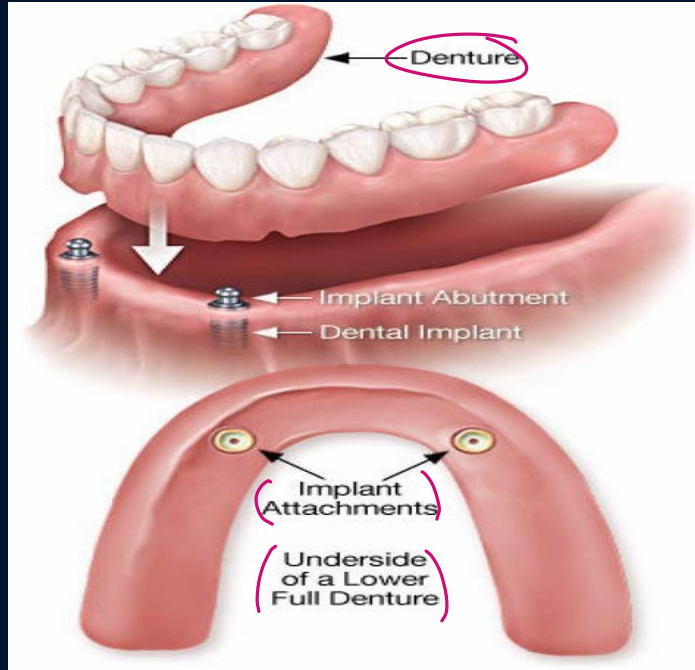
Fixed

Removable

Implant

(fixed +
Removable)

Maxillofacial



الناس يابى عندهم مشكلة
stability of denture

فريق
holes
بيجملوا
fitting
مزيد دا
من
Stability

يتم تركيبها مع تشال أجزاء

Sometimes implants are used to help in denture stability (Overdenture)

Prosthodontics

Fixed

Removable

Implant

Maxillofacial



یہی کھری مہش بسن الأسنان بکیراحت عنزی ، فی

أشیاء أخرى
من البرجہ.

Make prosthetic
replacements of other
areas of the mouth and
face lost by disease and
trauma



06

**Treatment goals
of Prosthodontics**

الهدف من الاستشارة السنية :

Treatment goals of Prosthodontics

توعية المريض للمحافظة على أسنانه

- Patient education
- Restoration of esthetics → أخرج الجمالية
- Improvement of mastication → يساعد في عملية المضغ
- Improvement of speech → يساعد في تحسين اللام
- Preservation of remaining oral structures → يحافظ على ما تبقى الأسنان



Treatment goals of Prosthodontics

- Maintenance of the health and comfort of the mouth
- Maintenance of the health of the TMJ
- General physical and psychological well being of the patient.

کلی استیج راج بودج
طبیعی



کستی نفسی
رخبرها
بغی طفال



Thank you
