

The image features a solid teal background. Two dark blue L-shaped brackets are positioned on the left and right sides. The left bracket starts at the top left and extends horizontally to the right, then vertically down. The right bracket starts at the top right and extends horizontally to the left, then vertically down. The text is centered between these brackets.

INTRODUCTION TO DENTISTRY

Course Intended Learning Outcomes

- Describe the history and scope of dentistry as a healthcare professional
- Demonstrate an understanding of dental terminology and be familiar with dental charting systems
- Summarize the basic anatomy and physiology of the oral cavity and associated structures

Course Intended Learning Outcomes

- Describe the relationship between oral health and overall systemic health
- Identify the roles and responsibilities of dentists and dental specialists in healthcare systems.
- Recognize the ethical and legal considerations relevant to dental practice

Evaluation Activity	Mark	Period (Week)
Midterm Exam	40	7-8
Project: Visit a dental clinic and prepare a report describing its facilities, services, and overall experience	-	7-12
Final Exam	60	16
Total	100	

	Date	Title	Instructor
1	25-2	The History and Evolution of Dentistry	Dr. Suha
2	4-3	Roles of Dentists in society	Dr. Noor
3	11-3	Medical and dental terminology 1	Dr. Dina
4	18-3	Medical and dental terminology 2	Dr. Dina
5	25-3	Introduction to oral anatomy 1	Dr. Aseel
6	1-4	Introduction to oral anatomy 2	Dr. Aseel
7	8-4	The impact of oral health on general health and quality of life	Dr. Mohammed
8	15-4	Introduction to Caries and the process of tooth decay	Dr. Marwa
9	22-4	Introduction to Periodontal disease	Dr. Najla
10	29-4	Introduction to Diagnostic Tools in Dentistry	Dr. Khadeeja
11	6-5	Introduction to dental practice: Restorative Dentistry and Prosthodontics	Dr. Wijdan
12	13-5	Introduction to dental practice: Diagnostic sciences and Oral surgery	Dr. Leen
13	20-5	Introduction to dental practice: Orthodontics and pediatric dentistry	Dr. Rawan
14	27-5	Principles of Ethics and professionalism in Dentistry	Dr. Aseel

HISTORY OF DENTISTRY



Lecture Outline:

- Definition of Dentistry
- Milestones in the History of Dentistry

What is Dentistry?

- Dentistry is a branch of **medicine** that focuses on the **diagnosis, prevention, and treatment** of conditions, disorders, and diseases affecting the **teeth, gums, mouth, and jaw**
- It plays a critical role in maintaining overall health, as oral health is closely linked to systemic health



Definition of Dentistry

- The evaluation, diagnosis, prevention, and/or treatment (nonsurgical, surgical, or related procedures) of diseases, disorders, and/or conditions of the oral cavity, maxillofacial area, and/or the adjacent and associated structures and their impact on the human body; provided by a **dentist**, within the scope of his/her education, training and experience, in accordance with the ethics of the profession and applicable law.



Origins of Dentistry

- Our knowledge of dentistry having been performed in ancient societies comes mainly from archaeological findings and historic records



Ancient beginnings

- A jaw was found in northern Italy
- Dating back around 14,000 years



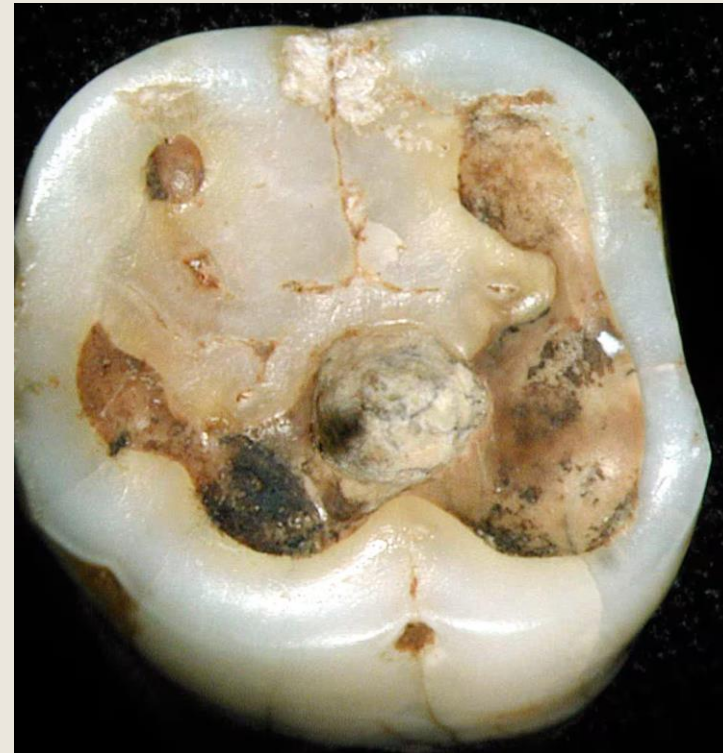
Ancient beginnings

- Using scanning electron microscopy, scientists revealed micro-scratches, chipping and cut marks on the tooth
- Sharp flint tools, were used to clean the tooth
- This marks an important development in the timeline of prehistoric dental surgery treatments



Ancient beginnings

- 7000 BCE: Evidence of dental drilling in Mehrgarh (modern-day Pakistan).
- More than 9000 years ago



Ancient beginnings

- 4500 BCE in Slovenia
- Remains of a human lower jaw
- The **first** evidence of use of beeswax as **restorative material**



Ancient beginnings

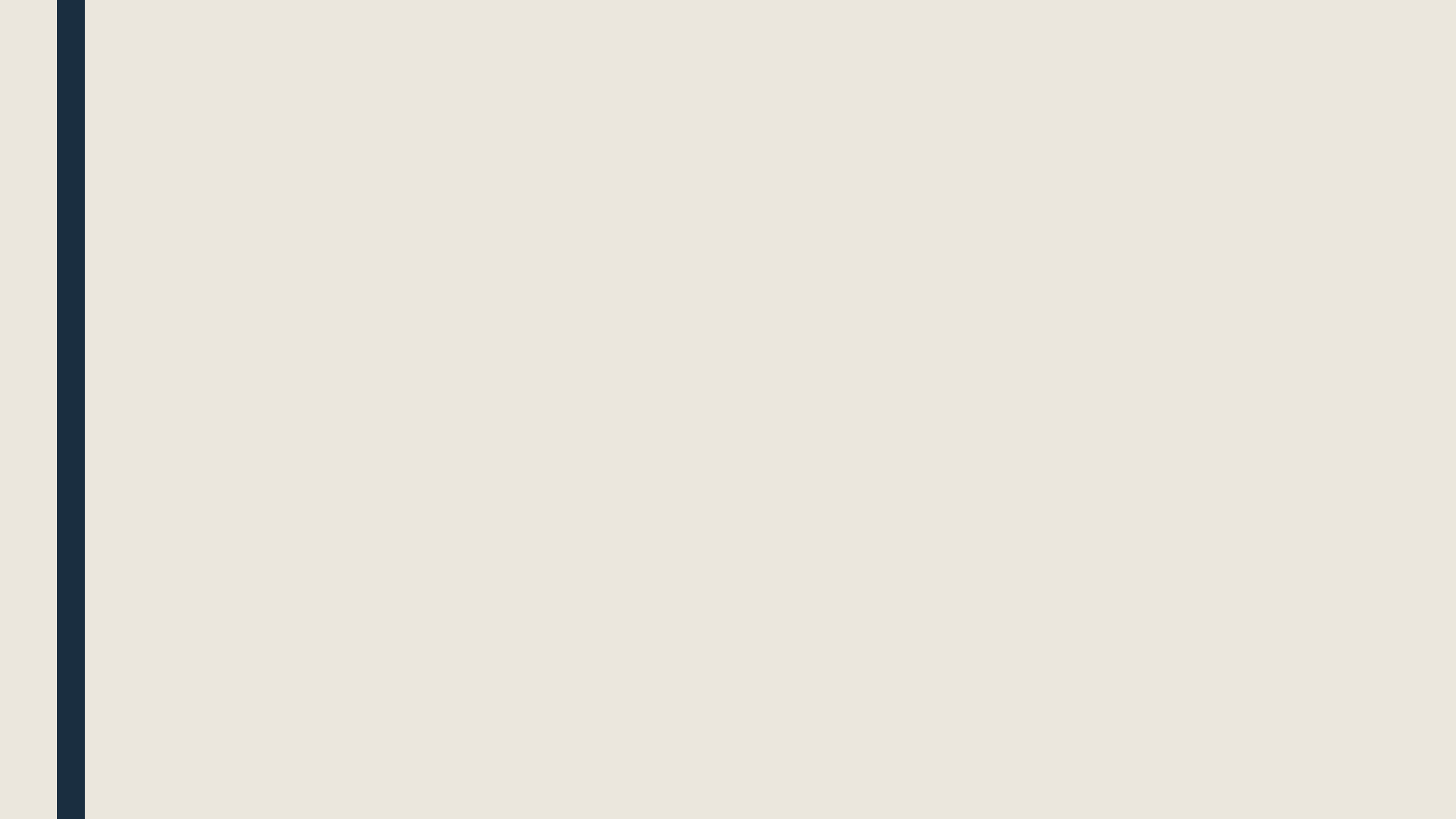
- Beeswax made an excellent ancient filling material because it had antibacterial and anti-inflammatory properties.
- It also could be softened at warm temperatures but solidified at body temperature



Ancient beginnings

- **Ancient Egypt (2500 BCE):**
Early dental practitioners
- Discovery of historic dental bridge 'Giza Bridge'





Theories for the origin of dental decay

- Records show the first mention of the tooth worm dates to 1800 BCE
- “The Legend of the Worm” tells the tale of the tooth worm, a creature that drinks the blood and eats the roots of the teeth, causing toothaches



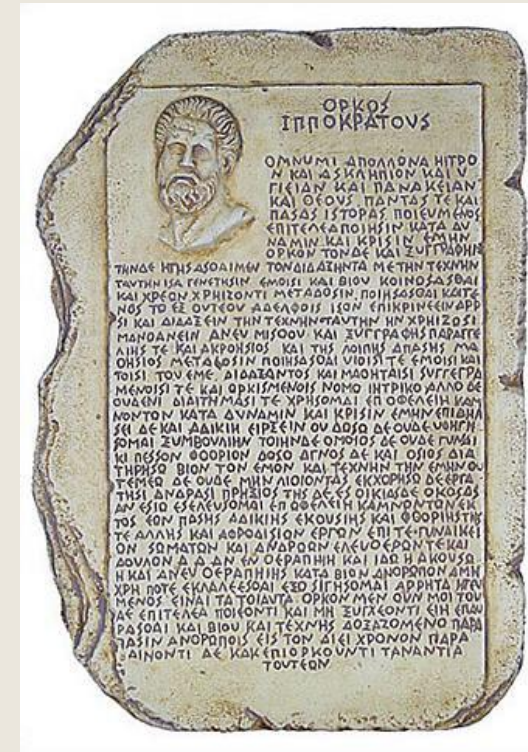
Theories for the origin of dental decay

- This was echoed by many civilizations from the Mayans to the Chinese and persisted until the 18th century, showing the superstitious roots of dentistry and medicine



Ancient Greece and Rome

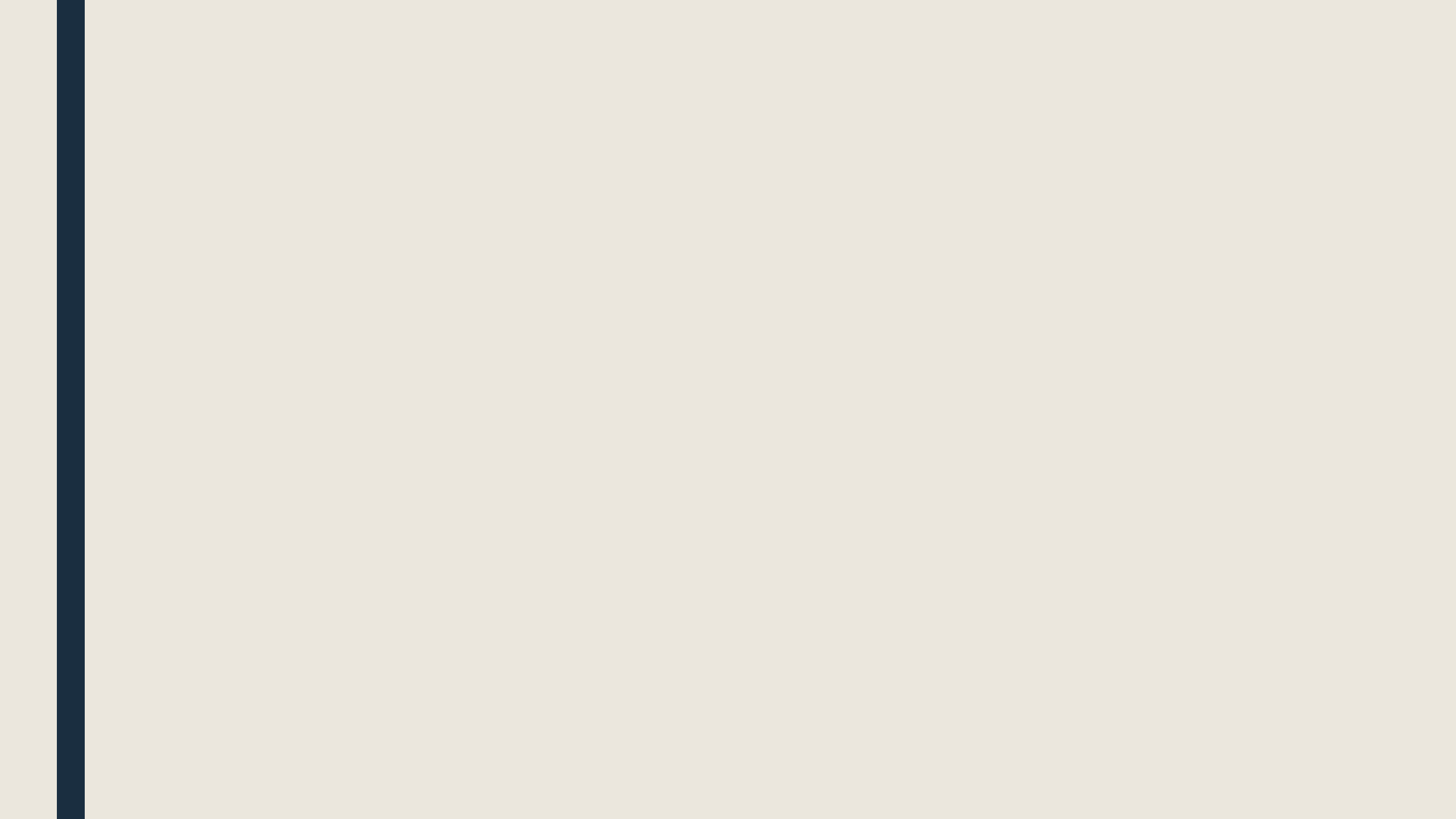
- Hippocrates (460–370 BCE):
 - Father of medicine, wrote about the use of ointments to treat tooth pain and detailed methods for removing teeth that were beyond repair
- Aristotle (384 to 322) BC
 - Study of human teeth in comparative anatomy



Early appliances

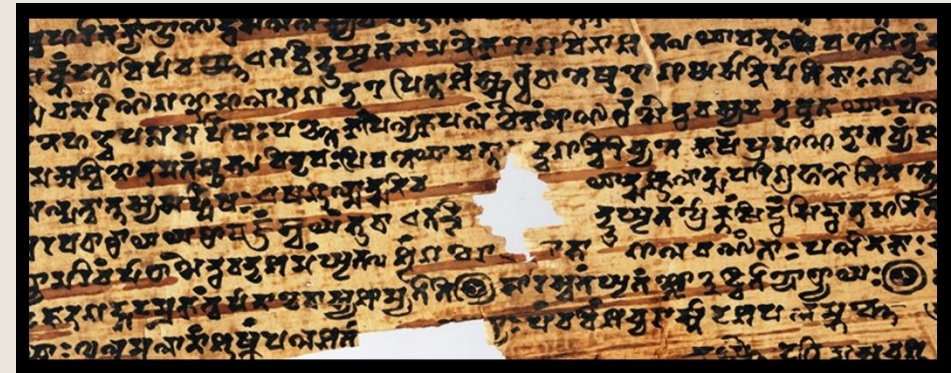
- 300 BCE
- Gold-wired supported loose teeth
- In Egypt and Greece





Bower Manuscript

- 400 CE
- The **Bower Manuscript**, an ancient Indian medical text found in 1890 in Kaschgar, Central Asia
- It is inscribed on birch bark and identifies among others, prescriptions for dental and oral care



Ancient Mayans

- 600 CE
- Installed Gem stones on teeth



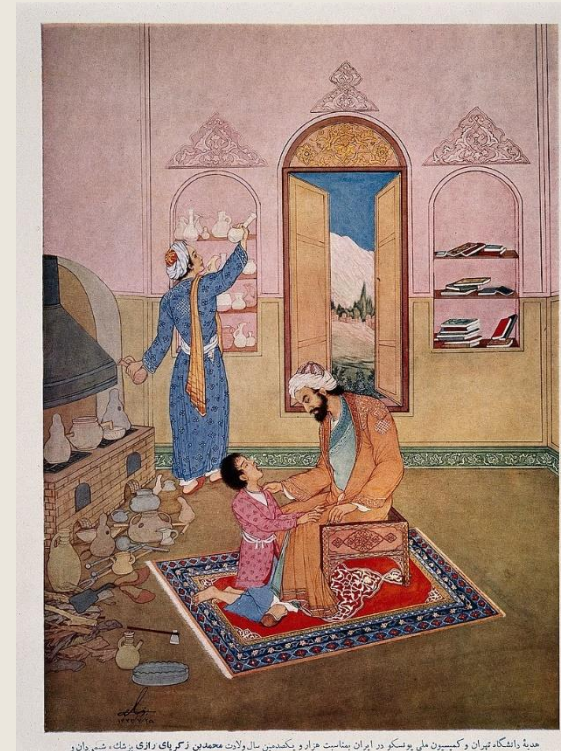
Dental Amalgam

- 600 CE
- Reports of dental Amalgam being used as a tooth filling
- T'Ang Dynasty in China



Golden Age of Islamic Civilization

- الرازي 865-925 CE
- كتاب الحاوي, AlHawi Book
- A section on tooth preservation includes a mixture for a brightening toothpaste



Golden Age of Islamic Civilization

- Abubakr al-Akawayni al-Bokhari (?- 983). البخاري
- Persian physician, author of the work Hidayat al Mutallimin fi-al-Tibb (هداية المتعلم في الطب)
- For **toothache** he recommended cauterization of the tooth with a hot iron and extraction only as a last resort



Golden Age of Islamic Civilization

- Abu al-Qasim, Al-Zahrawi, 936 – 1013 الزهراوي
- Arab physician and surgeon from Al-Andalus.
- Father of surgery
- His main work Kitab al-Tsarif كتاب التصريف is a 30-volume encyclopedia on medicine
- It contained the earliest illustrations of dental instruments.



Golden Age of Islamic Civilization

- Avicenna (Ibn Sina, 981 – 1037), ابن سينا, physician, poet, philosopher
- Wrote al-Qanun fi'l-Tibb القانون في الطب, a 5-volume work on health, including oral health



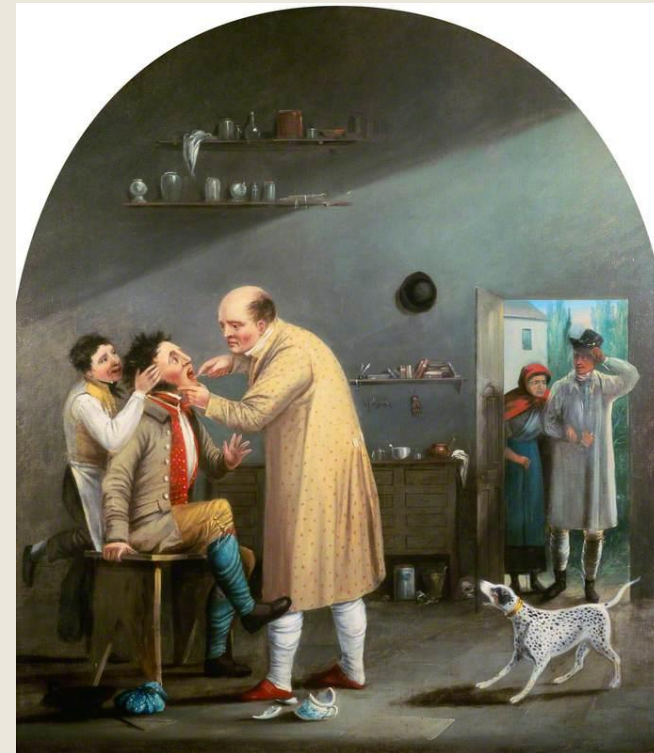
The Pelican

- 1363
- **Guy de Chauliac**, the most important French surgeon for the XIV century
- He is credited for describing the pelican as an instrument to extract teeth



Barbers and Dentistry

- Up until the mid-eighteenth century, the main providers of dental services were barber-surgeons.



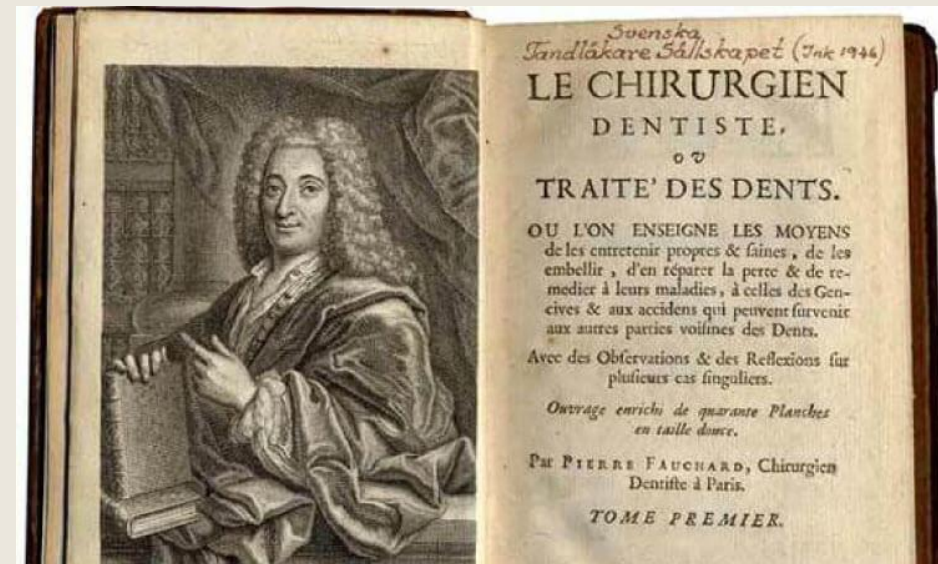
Pierre Fauchard

- 1728 Pierre Fauchard, French surgeon-dentist,
 - assembled the first comprehensive work on dentistry and published it under the title **Le Chirurgien Dentiste**. ‘The Dental Surgeon’



Pierre Fauchard

- Fauchard is considered the Father of modern dentistry.
- Compiled in two volumes; all that was known about the dental field, the anatomy, physiology and pathology of the teeth and surrounding structures.
- It also listed the instruments and procedures at the time.



Foot operated dental drill

- John Greenwood, a prominent New York dentist
- Created the **first foot operated dental drill** in 1790 from his mother's foot-treadle spinning wheel for sewing.





Dental Unit



Composite Resin

- 1962
- Modern **composite resins** based on Bis-GMA, a metachrylate monomer used in composite restorative materials is invented by **Rafael Bowen**



Clear Aligners

- 1997, Invisalign was created by Zia Chisti in San Jose, California



Digital Intra oral Scanners

- First invented in the 1980s
- Now polished and refined scanners are present and are an essential part of digital Dentistry





